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MIT Lincoln Laboratory Employee Relocation: Traffic Impact Study

Appendices

This report was produced by the Central Transportation Planning Staff for Hanscom Air Force Base

MIT Lincoln Laboratory Employee Relocation: Traffic Impact Study

Appendices

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Massachusetts Department of Public Works
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APPENDIX A

Socioeconomic Data by Traffic Analysis Zone

1990

1995 No-Build

1995 Build

1990 SOCIOECONOMIC DATA

file name :c:route2\route2.pop

<---------- or ---->

Zone	House Holds	Income 1980 $	Retail employ	Non-Re employ	24 hr volume
1	449	43335	0	225	0
2	447	42750	0	151	0
3	239	36581	20	675	0
4	552	33238	0	1365	0
5	923	27310	400	941	0
6	523	59590	45	370	0
7	389	34924	45	125	0
8	344	36469	45	415	0
9	100	35505	150	200	0
10	210	32180	410	984	0
11	447	43335	0	145	0
12	229	32180	0	125	0
13	0	35505	45	205	0
14	167	35505	65	1463	0
15	554	29112	0	200	0
16	850	28632	0	195	0
17	370	27958	180	695	0
18	131	30009	0	1399	0
19	255	40524	0	230	0
20	8	37893	0	800	0
21	444	28985	233	395	0
22	553	35136	175	285	0
23	354	18991	285	4990	0
24	90	31691	0	7750	0
25	190	47656	0	70	0
26	120	47656	0	644	0
27	1258	19477	0	0	0
28	114	47656	0	30	0
29	270	47656	136	199	0
30	385	47656	0	195	0
31	348	47656	20	145	0
32	314	47656	0	140	0
33	120	47656	0	140	0
34	1026	41463	75	560	0
35	354	39274	0	1732	0
36	0	0	0	2400	0
37	1020	35684	375	913	0
38	521	33619	240	815	0
39	898	39455	0	105	0
40	153	33659	0	85	0
41	991	33210	38	0	0
42	217	31569	490	919	0
43	448	41395	217	0	0
44	969	39859	54	250	0
45	549	31270	0	290	0
46	1876	37103	230	563	0
47	620	34563	120	1496	0
48	526	34834	65	1528	0
49	12	35404	0	750	0
50	0	0	0	522	0

file name :c:route2\route2.pop

<---------- or ---->

Zone	House Holds	Income 1980 $	Retail employ	Non-Re employ	24 hr volume
51	111	28888	0	4900	0
52	0	0	5279	2927	0
53	0	0	0	7222	0
54	0	0	190	387	0
55	0	0	0	1900	0
56	279	35505	0	0	0
57	0	0	0	276	0
58	75	47656	0	100	0
59	100	41463	50	0	0
60	0	0	90	1000	0
61	620	25649	99	926	0
62	195	25649	186	801	0
63	44	32173	15	389	0
64	146	25649	349	425	0
65	85	32173	0	275	0
66	65	32173	0	460	0
67	770	25649	398	425	0
68	350	36153	72	225	0
69	250	36153	0	150	0
70	185	32173	22	0	0
71	500	33558	110	250	0
72	202	36668	19	563	0
73	484	35331	0	0	0
74	452	26283	147	110	0
75	45	32173	155	280	0
76	170	32173	324	85	0
77	60	32173	0	477	0
78	203	30302	83	50	0
79	355	32173	19	199	0
80	712	32173	174	617	0
81	99	22060	87	180	0
82	100	27310	0	950	0
83	100	32173	305	75	0
84	0	0	0	3000	0
85	0	0	45	150	0
86	100	35505	0	0	0
87	0	0	0	400	0
88	300	30009	0	0	0
89	160	32173	0	80	0
90	0	0	0	150	0
91	119	35505	250	290	0
92	0	0	0	0	6737
93	0	0	0	0	129
94	0	0	0	0	7323
95	0	0	0	0	15610
96	0	0	0	0	956
97	0	0	0	0	1022
98	0	0	0	0	4375
99	0	0	0	0	73559
100	0	0	0	0	5883

file name :c:route2\route2.pop

<---------- or ---->

Zone	House Holds	Income 1980 $	Retail employ	Non-Re employ	24 hr volume
101	0	0	0	0	14218
102	0	0	0	0	13806
103	0	0	0	0	6610
104	0	0	0	0	9613
105	0	0	0	0	1887
106	0	0	0	0	9800
107	0	0	0	0	815
108	0	0	0	0	34164
109	0	0	0	0	4627
110	0	0	0	0	602
111	0	0	0	0	14873
112	0	0	0	0	6710
113	0	0	0	0	34564
114	0	0	0	0	157598
115	0	0	0	0	4719
116	0	0	0	0	8310
117	0	0	0	0	6880
118	0	0	0	0	14674
119	0	0	0	0	14155
120	0	0	0	0	66303
121	0	0	0	0	10529
122	0	0	0	0	6330
123	0	0	0	0	20404
124	0	0	0	0	22055
125	0	0	0	0	10570
126	0	0	0	0	161503
127	0	0	0	0	1141
128	0	0	0	0	10649
129	0	0	0	0	1372
130	0	0	0	0	1324
131	0	0	0	0	177
132	0	0	0	0	7581
133	0	0	0	0	3906
134	0	0	0	0	8719
135	0	0	0	0	1946
136	0	0	0	0	827
137	0	0	0	0	11795
138	0	0	0	0	2934
139	0	0	0	0	13346
140	0	0	0	0	1958
141	0	0	0	0	2919
142	0	0	0	0	1460
143	0	0	0	0	5101

1995 NO-BUILD SOCIOECONOMIC DATA

file name :c:route2\95mitnbl.pop

<---------- or ---->

Zone	House Holds	Income 1980 $	Retail employ	Non-Re employ	24 hr volume
1	457	43335	0	211	0
2	447	42750	0	142	0
3	239	36581	18	633	0
4	552	33238	0	1280	0
5	989	27310	362	882	0
6	523	59590	41	347	0
7	423	34924	41	117	0
8	344	36469	41	389	0
9	100	35505	136	879	0
10	210	32180	371	922	0
11	452	43335	0	136	0
12	229	32180	0	117	0
13	0	0	56	192	0
14	167	35505	59	1371	0
15	564	29112	14	196	0
16	861	28632	0	192	0
17	370	27958	183	683	0
18	131	30009	0	1374	0
19	270	40524	0	226	0
20	8	37893	0	786	0
21	444	28985	321	475	0
22	597	35136	178	280	0
23	354	18991	393	4902	0
24	90	31691	0	7981	0
25	190	47656	0	63	0
26	120	47656	0	871	0
27	1258	19477	0	0	0
28	114	47656	0	27	0
29	270	47656	144	180	0
30	385	47656	0	177	0
31	357	47656	21	131	0
32	335	47656	0	127	0
33	128	47656	0	127	0
34	1044	41463	69	536	0
35	354	39274	0	1659	0
36	0	0	0	2400	0
37	1033	35684	345	875	0
38	521	33619	221	781	0
39	895	39455	0	101	0
40	153	33659	0	81	0
41	991	33210	38	0	0
42	217	31569	451	880	0
43	448	41392	200	0	0
44	1083	39859	50	240	0
45	571	31270	0	278	0
46	1876	37103	212	539	0
47	620	34563	110	2349	0
48	756	34843	60	1464	0
49	12	35404	0	719	0
50	0	0	0	500	0

file name :c:route2\95mitnbl.pop

<---------- or ---->

Zone	House Holds	Income 1980 $	Retail employ	Non-Re employ	24 hr volume
51	115	28888	148	6030	0
52	0	0	5166	2805	0
53	0	0	0	7094	0
54	0	0	175	371	0
55	0	0	0	1781	0
56	279	35505	0	0	0
57	0	0	0	259	0
58	75	47656	0	91	0
59	100	41463	46	0	0
60	0	0	83	958	0
61	620	25649	132	2025	0
62	195	25649	179	800	0
63	44	32173	14	375	0
64	166	25649	336	409	0
65	103	32173	0	265	0
66	65	32173	0	557	0
67	804	25649	545	409	0
68	350	36153	69	217	0
69	250	36153	0	144	0
70	185	32153	21	0	0
71	500	33558	106	241	0
72	208	36668	18	585	0
73	488	35331	0	0	0
74	488	26283	142	106	0
75	45	32173	149	414	0
76	170	32173	312	82	0
77	60	32173	0	459	0
78	224	30302	80	48	0
79	412	32173	18	192	0
80	767	32173	168	895	0
81	99	22060	84	173	0
82	100	27310	0	891	0
83	100	32173	294	72	0
84	0	0	0	2874	0
85	0	0	41	141	0
86	100	33505	0	0	0
87	0	0	0	383	0
88	300	30009	0	0	0
89	160	32173	0	77	0
90	0	0	0	144	0
91	119	33505	226	272	0
92	0	0	0	0	7243
93	0	0	0	0	133
94	0	0	0	0	7600
95	0	0	0	0	16047
96	0	0	0	0	983
97	0	0	0	0	988
98	0	0	0	0	4898
99	0	0	0	0	81145
100	0	0	0	0	6048

file name :c:route2\95mitnbl.pop

<---------- or ---->

Zone	House Holds	Income 1980 $	Retail employ	Non-Re employ	24 hr volume
101	0	0	0	0	14554
102	0	0	0	0	15457
103	0	0	0	0	7400
104	0	0	0	0	10762
105	0	0	0	0	2073
106	0	0	0	0	10185
107	0	0	0	0	895
108	0	0	0	0	36375
109	0	0	0	0	4741
110	0	0	0	0	617
111	0	0	0	0	15277
112	0	0	0	0	7091
113	0	0	0	0	38696
114	0	0	0	0	163994
115	0	0	0	0	4799
116	0	0	0	0	8451
117	0	0	0	0	6920
118	0	0	0	0	14328
119	0	0	0	0	13821
120	0	0	0	0	70529
121	0	0	0	0	10401
122	0	0	0	0	6326
123	0	0	0	0	20356
124	0	0	0	0	22039
125	0	0	0	0	10562
126	0	0	0	0	167977
127	0	0	0	0	1140
128	0	0	0	0	10294
129	0	0	0	0	1326
130	0	0	0	0	1280
131	0	0	0	0	173
132	0	0	0	0	7401
133	0	0	0	0	4123
134	0	0	0	0	8428
135	0	0	0	0	2054
136	0	0	0	0	857
137	0	0	0	0	12232
138	0	0	0	0	2965
139	0	0	0	0	14197
140	0	0	0	0	2080
141	0	0	0	0	3066
142	0	0	0	0	1582
143	0	0	0	0	5527

1995 BUILD SOCIOECONOMIC DATA

file name :c:route2\95route2.pop

<---------- or ---->

Zone	House Holds	Income 1980 $	Retail employ	Non-Re employ	24 hr volume
1	457	43335	0	211	0
2	447	42750	0	142	0
3	239	36581	18	633	0
4	552	33238	0	1280	0
5	989	27310	362	882	0
6	523	59590	41	347	0
7	423	34924	41	117	0
8	344	36469	41	389	0
9	100	35505	136	879	0
10	210	32180	371	922	0
11	452	43335	0	136	0
12	229	32180	0	117	0
13	0	0	56	192	0
14	167	35505	59	1371	0
15	564	29112	14	196	0
16	861	28632	0	192	0
17	370	27958	183	683	0
18	131	30009	0	1374	0
19	270	40524	0	226	0
20	8	37893	0	786	0
21	444	28985	321	475	0
22	597	35136	178	280	0
23	354	18991	393	4902	0
24	90	31691	0	7981	0
25	190	47656	0	63	0
26	120	47656	0	871	0
27	1258	19477	0	0	0
28	114	47656	0	27	0
29	270	47656	144	180	0
30	385	47656	0	177	0
31	357	47656	21	131	0
32	335	47656	0	127	0
33	128	47656	0	127	0
34	1044	41463	69	536	0
35	354	39274	0	1659	0
36	0	0	0	2932	0
37	1033	35684	345	875	0
38	521	33619	221	781	0
39	895	39455	0	101	0
40	153	33659	0	81	0
41	991	33210	38	0	0
42	217	31569	451	880	0
43	448	41392	200	0	0
44	1083	39859	50	240	0
45	571	31270	0	278	0
46	1876	37103	212	539	0
47	620	34563	110	2349	0
48	756	34843	60	1464	0
49	12	35404	0	719	0
50	0	0	0	500	0

file name :c:route2\95route2.pop

<---------- or ---->

Zone	House Holds	Income 1980 $	Retail employ	Non-Re employ	24 hr volume
51	115	28888	148	6030	0
52	0	0	5166	2805	0
53	0	0	0	7094	0
54	0	0	175	371	0
55	0	0	0	1781	0
56	279	35505	0	0	0
57	0	0	0	259	0
58	75	47656	0	91	0
59	100	41463	46	0	0
60	0	0	83	958	0
61	620	25649	132	2025	0
62	195	25649	179	800	0
63	44	32173	14	375	0
64	166	25649	336	409	0
65	103	32173	0	265	0
66	65	32173	0	557	0
67	804	25649	545	409	0
68	350	36153	69	217	0
69	250	36153	0	144	0
70	185	32153	21	0	0
71	500	33558	106	241	0
72	208	36668	18	585	0
73	488	35331	0	0	0
74	488	26283	142	106	0
75	45	32173	149	414	0
76	170	32173	312	82	0
77	60	32173	0	459	0
78	224	30302	80	48	0
79	412	32173	18	192	0
80	767	32173	168	895	0
81	99	22060	84	173	0
82	100	27310	0	891	0
83	100	32173	294	72	0
84	0	0	0	2874	0
85	0	0	41	141	0
86	100	33505	0	0	0
87	0	0	0	383	0
88	300	30009	0	0	0
89	160	32173	0	77	0
90	0	0	0	144	0
91	119	33505	226	272	0
92	0	0	0	0	7243
93	0	0	0	0	133
94	0	0	0	0	7600
95	0	0	0	0	16047
96	0	0	0	0	983
97	0	0	0	0	988
98	0	0	0	0	4898
99	0	0	0	0	81145
100	0	0	0	0	6048

file name :c:route2\95route2.pop

<---------- or ---->

Zone	House Holds	Income 1980 $	Retail employ	Non-Re employ	24 hr volume
101	0	0	0	0	14554
102	0	0	0	0	15457
103	0	0	0	0	7400
104	0	0	0	0	10762
105	0	0	0	0	2073
106	0	0	0	0	10185
107	0	0	0	0	895
108	0	0	0	0	36375
109	0	0	0	0	4741
110	0	0	0	0	617
111	0	0	0	0	15277
112	0	0	0	0	7091
113	0	0	0	0	38696
114	0	0	0	0	163994
115	0	0	0	0	4799
116	0	0	0	0	8451
117	0	0	0	0	6920
118	0	0	0	0	14328
119	0	0	0	0	13821
120	0	0	0	0	70529
121	0	0	0	0	10401
122	0	0	0	0	6326
123	0	0	0	0	20356
124	0	0	0	0	22039
125	0	0	0	0	10562
126	0	0	0	0	167977
127	0	0	0	0	1140
128	0	0	0	0	10294
129	0	0	0	0	1326
130	0	0	0	0	1280
131	0	0	0	0	173
132	0	0	0	0	7401
133	0	0	0	0	4123
134	0	0	0	0	8428
135	0	0	0	0	2054
136	0	0	0	0	857
137	0	0	0	0	12232
138	0	0	0	0	2965
139	0	0	0	0	14197
140	0	0	0	0	2080
141	0	0	0	0	3066
142	0	0	0	0	1582
143	0	0	0	0	5527

APPENDIX B

Traffic Counts

1989 Counts Done for the Hanscom Air Force Base Employee Relocation Traffic Impact Study

1989-1990 Counts Done for the MDPW Route 2 Study

1988-1990 Counts Done for the MDPW Route 128 Study

1989 Counts
Done for the Hanscom Air Force Base Employee Relocation Study

Automatic Traffic Recorder Counts, Locations 1-31
Automatic Traffic Recorder Counts, Locations A-F
Intersection Turning Movement Counts

ATR's (both directions)

Location #	
1.	Old Middlesex Turnpike at Bedford/Billerica TL
2.	East Street at Woburn/Lexington TL
3.	Woburn Street at Woburn/Lexington TL
4.	Winchester Drive at Winchester/Lexington TL
5.	Lowell Street north of Summer Street
6.	Massachusetts Avenue at Lexington/Arlington TL
7.	Watertown Street at Lexington/Belmont TL
8.	Concord Avenue at Lexington/Belmont TL
9.	Trapelo Road east of Woburn Street
10.	Waltham Street south of Trapelo Road
11.	Wyman Street south of Trapelo Road
12.	Winter Street at Lincoln/Waltham TL
13.	Route 117 east of Conant Road
14.	Conant Road south of Route 117
15.	Merriam Street south of Route 117
16.	Lincoln Road south of Old Sudbury Road
17.	Concord Road (Route 126) south of Old Sudbury Road
18.	Concord Road at Sudbury/Concord TL
19.	Route 117 at Sudbury/Concord TL
20.	Dakin Road at Sudbury/Concord TL
21.	Powers Road at Sudbury/Concord TL
22.	Route 62 (Main Street) at Acton/Concord TL
23.	Laws Brook at Acton/Concord TL
24.	Route 2A at Acton/Concord TL

25. Strawberry Hill Road at Acton/Concord TL
26. West Road at Concord/Carlisle TL
27. Lowell Road at Concord/Carlisle TL
28. Bedford Road (Route 225) south of Maple Street
29. Dudley Road at Bedford/Billerica TL
30. North Road (Route 4) at Bedford/Billerica TL
31. Old Billerica Road at Bedford/Billerica TL

AUTOMATIC TRAFFIC RECORDER COUNT - - SUMMARY

FOR: CENTRAL TRANSPORTATION PLANNING STAFF
BY: NORTHEAST TRAFFIC COUNTS
FILE: HAN-BED-1 L-57 L:52 #260

LOCATION: OLD MIDDLESEX TURNPIKE
1 AT BEDFORD/BILLERICA TOWN LINE

CITY/TOWN: BEDFORD/BILLERICA, MASSACHUSETTS

DATE: OCTOBER, 1989

TOTAL HOURLY TRAFFIC VOLUMES

	SUN	MON 10/16	TUE 10/17	WED 10/18	THUR 10/19	FRI	SAT	
12- 1A	-	-	66	88	95	-	-	12-1 A
1- 2	-	-	20	34	31	-	-	1-2
2- 3	-	-	16	20	23	-	-	2-3
3- 4	-	-	14	12	15	-	-	3-4
4- 5	-	-	29	33	33	-	-	4-5
5- 6	-	-	165	155	166	-	-	5-6
6- 7	-	-	797	578	797	-	-	6-7
7- 8	-	-	1505	1465	1550	-	-	7-8
8- 9	-	-	1501	930	-	-	-	8-9
9-10	-	-	841	862	-	-	-	9-10
10-11	-	-	534	439	-	-	-	10-11
11-12	-	-	849	700	-	-	-	11-12
12- 1P	-	-	1150	1151	-	-	-	12-1 P
1- 2	-	882	892	800	-	-	-	1-2
2- 3	-	879	844	700	-	-	-	2-3
3- 4	-	1080	1064	987	-	-	-	3-4
4- 5	-	1425	1378	1083	-	-	-	4-5
5- 6	-	1314	1298	1210	-	-	-	5-6
6- 7	-	925	1095	899	-	-	-	6-7
7- 8	-	498	548	400	-	-	-	7-8
8- 9	-	361	300	390	-	-	-	8-9
9-10	-	279	300	373	-	-	-	9-10
10-11	-	221	251	155	-	-	-	10-11
11-12	-	147	154	179	-	-	-	11-12
TOTAL	0	8011	15611	13643	2710	0	0	TOTAL

AUTOMATIC TRAFFIC RECORDER COUNT - - SUMMARY

FOR: CENTRAL TRANSPORTATION PLANNING STAFF
BY: NORTHEAST TRAFFIC COUNTS
FILE: HAN-LEX-2 L-57 L:52 #260

LOCATION: EAST STREET
2 AT LEXINGTON/WOBURN TOWN LINE

CITY/TOWN: LEXINGTON/WOBURN, MASSACHUSETTS

DATE: OCTOBER, 1989

TOTAL HOURLY TRAFFIC VOLUMES

	SUN	MON 10/16	TUE 10/17	WED 10/18	THUR 10/19	FRI	SAT	
12- 1A	-	-	25	17	21	-	-	12-1 A
1- 2	-	-	1	9	5	-	-	1-2
2- 3	-	-	0	1	0	-	-	2-3
3- 4	-	-	5	8	6	-	-	3-4
4- 5	-	-	10	26	19	-	-	4-5
5- 6	-	-	69	109	86	-	-	5-6
6- 7	-	-	202	337	-	-	-	6-7
7- 8	-	-	326	401	-	-	-	7-8
8- 9	-	-	298	263	-	-	-	8-9
9-10	-	-	192	228	-	-	-	9-10
10-11	-	-	175	234	-	-	-	10-11
11-12	-	-	204	273	-	-	-	11-12
12- 1P	-	-	231	299	-	-	-	12-1 P
1- 2	-	-	268	283	-	-	-	1-2
2- 3	-	248	297	387	-	-	-	2-3
3- 4	-	283	267	304	-	-	-	3-4
4- 5	-	416	538	489	-	-	-	4-5
5- 6	-	401	487	381	-	-	-	5-6
6- 7	-	307	356	339	-	-	-	6-7
7- 8	-	201	285	276	-	-	-	7-8
8- 9	-	173	148	141	-	-	-	8-9
9-10	-	122	160	123	-	-	-	9-10
10-11	-	75	38	64	-	-	-	10-11
11-12	-	42	28	32	-	-	-	11-12
TOTAL	0	2268	4610	5024	137	0	0	TOTAL

AUTOMATIC TRAFFIC RECORDER COUNT - - SUMMARY

FOR: CENTRAL TRANSPORTATION PLANNING STAFF
BY: NORTHEAST TRAFFIC COUNTS
FILE: HAN-LEX-3 L-57 L:52 #260

LOCATION: WOBURN STREET
3 AT LEXINGTON/WOBURN TOWN LINE

CITY/TOWN: LEXINGTON/WOBURN, MASSACHUSETTS

DATE: OCTOBER, 1989

TOTAL HOURLY TRAFFIC VOLUMES

	SUN	MON 10/16	TUE 10/17	WED 10/18	THUR 10/19	FRI	SAT	
12- 1A	-	-	46	36	41	-	-	12-1 A
1- 2	-	-	21	10	15	-	-	1-2
2- 3	-	-	8	15	9	-	-	2-3
3- 4	-	-	2	2	6	-	-	3-4
4- 5	-	-	10	12	19	-	-	4-5
5- 6	-	-	66	65	68	-	-	5-6
6- 7	-	-	277	294	-	-	-	6-7
7- 8	-	-	720	727	-	-	-	7-8
8- 9	-	-	714	647	-	-	-	8-9
9-10	-	-	402	415	-	-	-	9-10
10-11	-	-	425	370	-	-	-	10-11
11-12	-	-	387	392	-	-	-	11-12
12- 1P	-	-	427	487	-	-	-	12-1 P
1- 2	-	-	431	514	-	-	-	1-2
2- 3	-	453	504	483	-	-	-	2-3
3- 4	-	604	610	628	-	-	-	3-4
4- 5	-	733	811	801	-	-	-	4-5
5- 6	-	915	966	960	-	-	-	5-6
6- 7	-	591	589	643	-	-	-	6-7
7- 8	-	418	416	442	-	-	-	7-8
8- 9	-	336	285	301	-	-	-	8-9
9-10	-	222	209	216	-	-	-	9-10
10-11	-	198	192	189	-	-	-	10-11
11-12	-	85	78	81	-	-	-	11-12
TOTAL	0	4555	8596	8730	158	0	0	TOTAL

AUTOMATIC TRAFFIC RECORDER COUNT - - SUMMARY

FOR: CENTRAL TRANSPORTATION PLANNING STAFF
BY: NORTHEAST TRAFFIC COUNTS
FILE: HAN-LEX-4 L-57 L:52 #260

LOCATION: WINCHESTER DRIVE
4 AT LEXINGTON/WINCHESTER TOWN LINE

CITY/TOWN: LEXINGTON/WINCHESTER, MASSACHUSETTS

DATE: OCTOBER, 1989

TOTAL HOURLY TRAFFIC VOLUMES

	SUN	MON 10/16	TUE 10/17	WED 10/18	THUR 10/19	FRI	SAT	
12- 1A	-	-	23	21	21	-	-	12-1 A
1- 2	-	-	12	11	15	-	-	1-2
2- 3	-	-	4	2	3	-	-	2-3
3- 4	-	-	5	6	6	-	-	3-4
4- 5	-	-	7	8	9	-	-	4-5
5- 6	-	-	32	32	38	-	-	5-6
6- 7	-	-	207	206	-	-	-	6-7
7- 8	-	-	644	616	-	-	-	7-8
8- 9	-	-	745	702	-	-	-	8-9
9-10	-	-	359	428	-	-	-	9-10
10-11	-	-	315	315	-	-	-	10-11
11-12	-	-	315	336	-	-	-	11-12
12- 1P	-	-	360	358	-	-	-	12-1 P
1- 2	-	-	328	352	-	-	-	1-2
2- 3	-	561	405	424	-	-	-	2-3
3- 4	-	526	546	519	-	-	-	3-4
4- 5	-	661	600	633	-	-	-	4-5
5- 6	-	758	775	748	-	-	-	5-6
6- 7	-	568	551	560	-	-	-	6-7
7- 8	-	337	307	322	-	-	-	7-8
8- 9	-	231	211	216	-	-	-	8-9
9-10	-	181	181	178	-	-	-	9-10
10-11	-	148	132	139	-	-	-	10-11
11-12	-	66	74	71	-	-	-	11-12
TOTAL	0	4037	7138	7203	92	0	0	TOTAL

AUTOMATIC TRAFFIC RECORDER COUNT - - SUMMARY

FOR: CENTRAL TRANSPORTATION PLANNING STAFF
BY: NORTHEAST TRAFFIC COUNTS
FILE: HAN-LEX-5 L-57 L:52 #260

LOCATION: LOWELL STREET
5 NORTH OF SUMMER STREET

CITY/TOWN: LEXINGTON, MASSACHUSETTS

DATE: OCTOBER, 1989

TOTAL HOURLY TRAFFIC VOLUMES

	SUN	MON	TUE 10/10	WED 10/11	THUR 10/12	FRI 10/13	SAT	
12- 1A	-	-	-	75	86	100	-	12-1 A
1- 2	-	-	-	27	25	49	-	1-2
2- 3	-	-	-	9	12	16	-	2-3
3- 4	-	-	-	12	14	17	-	3-4
4- 5	-	-	-	26	37	27	-	4-5
5- 6	-	-	-	121	122	125	-	5-6
6- 7	-	-	-	489	472	484	-	6-7
7- 8	-	-	-	1104	1147	1097	-	7-8
8- 9	-	-	-	1108	1139	1124	-	8-9
9-10	-	-	-	742	773	780	-	9-10
10-11	-	-	-	706	750	725	-	10-11
11-12	-	-	-	746	880	858	-	11-12
12- 1P	-	-	-	856	955	-	-	12-1 P
1- 2	-	-	-	801	910	-	-	1-2
2- 3	-	-	-	957	929	-	-	2-3
3- 4	-	-	-	1138	1151	-	-	3-4
4- 5	-	-	-	1160	1227	-	-	4-5
5- 6	-	-	-	1326	1340	-	-	5-6
6- 7	-	-	-	1114	1082	-	-	6-7
7- 8	-	-	720	834	829	-	-	7-8
8- 9	-	-	519	564	657	-	-	8-9
9-10	-	-	493	511	606	-	-	9-10
10-11	-	-	313	388	374	-	-	10-11
11-12	-	-	204	192	236	-	-	11-12
TOTAL	0	0	2249	15006	15753	5402	0	TOTAL

AUTOMATIC TRAFFIC RECORDER COUNT - - SUMMARY

FOR: CENTRAL TRANSPORTATION PLANNING STAFF
BY: NORTHEAST TRAFFIC COUNTS
FILE: HAN-LEX-6 L-57 L:52 #260

LOCATION: MASSACHUSETTS AVENUE
6 AT LEXINGTON/ARLINGTON TOWN LINE

CITY/TOWN: LEXINGTON, MASSACHUSETTS

DATE: OCTOBER, 1989

TOTAL HOURLY TRAFFIC VOLUMES

	SUN	MON	TUE 10/10	WED 10/11	THUR 10/12	FRI 10/13	SAT	
12- 1A	-	-	-	64	86	61	-	12-1 A
1- 2	-	-	-	23	25	13	-	1-2
2- 3	-	-	-	7	12	12	-	2-3
3- 4	-	-	-	14	14	10	-	3-4
4- 5	-	-	-	33	37	40	-	4-5
5- 6	-	-	-	121	122	108	-	5-6
6- 7	-	-	-	321	472	327	-	6-7
7- 8	-	-	-	784	1147	768	-	7-8
8- 9	-	-	-	905	1139	976	-	8-9
9-10	-	-	-	785	773	808	-	9-10
10-11	-	-	-	786	750	762	-	10-11
11-12	-	-	-	820	880	873	-	11-12
12- 1P	-	-	-	973	955	952	-	12-1 P
1- 2	-	-	-	903	910	946	-	1-2
2- 3	-	-	-	917	929	984	-	2-3
3- 4	-	-	-	1053	1151	1052	-	3-4
4- 5	-	-	-	1100	1227	1176	-	4-5
5- 6	-	-	-	1211	1340	1240	-	5-6
6- 7	-	-	966	1059	1082	1071	-	6-7
7- 8	-	-	675	756	829	826	-	7-8
8- 9	-	-	533	556	657	619	-	8-9
9-10	-	-	453	344	606	482	-	9-10
10-11	-	-	240	295	374	282	-	10-11
11-12	-	-	149	153	236	142	-	11-12
TOTAL	0	0	3016	13983	15753	14530	0	TOTAL

AUTOMATIC TRAFFIC RECORDER COUNT - - SUMMARY

FOR: CENTRAL TRANSPORTATION PLANNING STAFF
BY: NORTHEAST TRAFFIC COUNTS
FILE: HAN-LEX-7 L-57 L:52 #260

LOCATION: WATERTOWN STREET
7 AT LEXINGTON/BELMONT TOWN LINE

CITY/TOWN: LEXINGTON/BELMONT, MASSACHUSETTS

DATE: OCTOBER, 1989

TOTAL HOURLY TRAFFIC VOLUMES

	SUN	MON	TUE 10/10	WED 10/11	THUR 10/12	FRI 10/13	SAT	
12- 1A	-	-	-	49	64	59	-	12-1 A
1- 2	-	-	-	14	21	21	-	1-2
2- 3	-	-	-	6	8	20	-	2-3
3- 4	-	-	-	11	9	10	-	3-4
4- 5	-	-	-	18	21	20	-	4-5
5- 6	-	-	-	106	112	109	-	5-6
6- 7	-	-	-	441	497	476	-	6-7
7- 8	-	-	-	911	908	892	-	7-8
8- 9	-	-	-	971	951	923	-	8-9
9-10	-	-	-	656	563	560	-	9-10
10-11	-	-	-	496	481	505	-	10-11
11-12	-	-	-	478	503	528	-	11-12
12- 1P	-	-	-	497	547	131	-	12-1 P
1- 2	-	-	-	510	551	539	-	1-2
2- 3	-	-	-	592	656	984	-	2-3
3- 4	-	-	-	881	875	-	-	3-4
						-	-	
4- 5	-	-	-	939	958	-	-	4-5
5- 6	-	-	-	1077	1100	-	-	5-6
6- 7	-	-	694	771	808	-	-	6-7
7- 8	-	-	456	476	555	-	-	7-8
						-	-	
8- 9	-	-	324	322	347	-	-	8-9
9-10	-	-	302	305	366	-	-	9-10
10-11	-	-	204	229	246	-	-	10-11
11-12	-	-	114	125	111	-	-	11-12
TOTAL	0	0	2094	10881	11258	5777	0	TOTAL

AUTOMATIC TRAFFIC RECORDER COUNT - - SUMMARY

FOR: CENTRAL TRANSPORTATION PLANNING STAFF
BY: NORTHEAST TRAFFIC COUNTS
FILE: HAN-LEX-8 L-57 L:52 #260

LOCATION: CONCORD AVENUE
8 AT LEXINGTON/BELMONT TOWN LINE

CITY/TOWN: LEXINGTON/BELMONT, MASSACHUSETTS

DATE: OCTOBER, 1989

TOTAL HOURLY TRAFFIC VOLUMES

	SUN	MON	TUE 10/10	WED 10/11	THUR 10/12	FRI 10/13	SAT	
12- 1A	-	-	-	23	24	28	-	12-1 A
1- 2	-	-	-	12	11	7	-	1-2
2- 3	-	-	-	5	2	7	-	2-3
3- 4	-	-	-	5	2	4	-	3-4
4- 5	-	-	-	3	9	12	-	4-5
5- 6	-	-	-	34	38	36	-	5-6
6- 7	-	-	-	179	214	170	-	6-7
7- 8	-	-	-	583	626	489	-	7-8
8- 9	-	-	-	891	820	454	-	8-9
9-10	-	-	-	418	322	221	-	9-10
10-11	-	-	-	295	280	198	-	10-11
11-12	-	-	-	340	302	310	-	11-12
12- 1P	-	-	-	330	285	375	-	12-1 P
1- 2	-	-	-	353	327	-	-	1-2
2- 3	-	-	-	362	383	-	-	2-3
3- 4	-	-	-	576	543	-	-	3-4
						-	-	
4- 5	-	-	-	612	538	-	-	4-5
5- 6	-	-	-	766	640	-	-	5-6
6- 7	-	-	546	457	416	-	-	6-7
7- 8	-	-	298	286	226	-	-	7-8
						-	-	
8- 9	-	-	194	188	114	-	-	8-9
9-10	-	-	184	166	119	-	-	9-10
10-11	-	-	116	129	87	-	-	10-11
11-12	-	-	100	98	54	-	-	11-12
TOTAL	0	0	1438	7111	6382	2311	0	TOTAL

AUTOMATIC TRAFFIC RECORDER COUNT - - SUMMARY

FOR: CENTRAL TRANSPORTATION PLANNING STAFF
BY: NORTHEAST TRAFFIC COUNTS
FILE: HAN-WAL-9 L-57 L:52 #260

LOCATION: TRAPELO ROAD
9 EAST OF WOBURN STREET

CITY/TOWN: WALTHAM, MASSACHUSETTS

DATE: OCTOBER, 1989

TOTAL HOURLY TRAFFIC VOLUMES

	SUN	MON	TUE 10/10	WED 10/11	THUR 10/12	FRI 10/13	SAT	
12- 1A	-	-	-	104	126	191	-	12-1 A
1- 2	-	-	-	50	53	89	-	1-2
2- 3	-	-	-	13	30	59	-	2-3
3- 4	-	-	-	28	21	33	-	3-4
4- 5	-	-	-	28	42	41	-	4-5
5- 6	-	-	-	146	158	141	-	5-6
6- 7	-	-	-	591	636	652	-	6-7
7- 8	-	-	-	1242	1265	1216	-	7-8
8- 9	-	-	-	1464	1494	1473	-	8-9
9-10	-	-	-	1094	1119	1132	-	9-10
10-11	-	-	-	925	943	1019	-	10-11
11-12	-	-	-	1247	1228	1202	-	11-12
12- 1P	-	-	-	1343	1333	1446	-	12-1 P
1- 2	-	-	-	1286	1190	1344	-	1-2
2- 3	-	-	-	1285	1393	-	-	2-3
3- 4	-	-	-	1515	1549	-	-	3-4
						-	-	
4- 5	-	-	-	1667	1687	-	-	4-5
5- 6	-	-	1838	1723	1706	-	-	5-6
6- 7	-	-	1530	1476	1498	-	-	6-7
7- 8	-	-	1120	1188	1200	-	-	7-8
						-	-	
8- 9	-	-	909	864	861	-	-	8-9
9-10	-	-	931	898	937	-	-	9-10
10-11	-	-	602	671	570	-	-	10-11
11-12	-	-	299	309	344	-	-	11-12
TOTAL	0	0	7229	21157	21383	10038	0	TOTAL

AUTOMATIC TRAFFIC RECORDER COUNT - - SUMMARY

FOR: CENTRAL TRANSPORTATION PLANNING STAFF
BY: NORTHEAST TRAFFIC COUNTS
FILE: HAN-WAL-10 L-57 L:52 #260

LOCATION: WALTHAM STREET
10 SOUTH OF TROPELO ROAD

CITY/TOWN: WALTHAM, MASSACHUSETTS

DATE: OCTOBER, 1989

TOTAL HOURLY TRAFFIC VOLUMES

	SUN	MON	TUE 10/10	WED 10/11	THUR 10/12	FRI 10/13	SAT	
12- 1A	-	-	-	137	145	187	-	12-1 A
1- 2	-	-	-	58	76	108	-	1-2
2- 3	-	-	-	30	34	69	-	2-3
3- 4	-	-	-	31	27	45	-	3-4
4- 5	-	-	-	36	38	36	-	4-5
5- 6	-	-	-	153	145	158	-	5-6
6- 7	-	-	-	603	644	488	-	6-7
7- 8	-	-	-	1327	1283	1173	-	7-8
8- 9	-	-	-	1567	1404	1554	-	8-9
9-10	-	-	-	1272	1282	1281	-	9-10
10-11	-	-	-	1123	1124	1230	-	10-11
11-12	-	-	-	1348	1193	1396	-	11-12
12- 1P	-	-	-	1687	1383	1446	-	12-1 P
1- 2	-	-	-	1575	1542	1344	-	1-2
2- 3	-	-	-	1309	1335	-	-	2-3
3- 4	-	-	-	1508	1566	-	-	3-4
						-	-	
4- 5	-	-	-	1501	1575	-	-	4-5
5- 6	-	-	1706	1841	1865	-	-	5-6
6- 7	-	-	1614	1594	1666	-	-	6-7
7- 8	-	-	1174	1466	1391	-	-	7-8
						-	-	
8- 9	-	-	970	1011	1154	-	-	8-9
9-10	-	-	939	915	984	-	-	9-10
10-11	-	-	645	654	644	-	-	10-11
11-12	-	-	289	301	435	-	-	11-12
TOTAL	0	0	7337	23047	22935	10515	0	TOTAL

AUTOMATIC TRAFFIC RECORDER COUNT - - SUMMARY

FOR: CENTRAL TRANSPORTATION PLANNING STAFF
BY: NORTHEAST TRAFFIC COUNTS
FILE: HAN-WAL-11 L-57 L:52 #260

LOCATION: WYMAN STREET
11 SOUTH OF TROPELO ROAD

CITY/TOWN: WALTHAM, MASSACHUSETTS

DATE: OCTOBER, 1989

TOTAL HOURLY TRAFFIC VOLUMES

	SUN	MON	TUE 10/10	WED 10/11	THUR 10/12	FRI 10/13	SAT	
12- 1A	-	-	-	29	32	59	-	12-1 A
1- 2	-	-	-	18	16	18	-	1-2
2- 3	-	-	-	12	10	23	-	2-3
3- 4	-	-	-	22	20	19	-	3-4
4- 5	-	-	-	33	35	29	-	4-5
5- 6	-	-	-	216	225	209	-	5-6
6- 7	-	-	-	571	546	614	-	6-7
7- 8	-	-	-	1243	1201	1092	-	7-8
8- 9	-	-	-	1142	1021	982	-	8-9
9-10	-	-	-	485	504	464	-	9-10
10-11	-	-	-	398	406	397	-	10-11
11-12	-	-	-	611	633	647	-	11-12
12- 1P	-	-	-	669	744	-	-	12-1 P
1- 2	-	-	-	562	637	-	-	1-2
2- 3	-	-	-	598	624	-	-	2-3
3- 4	-	-	-	715	743	-	-	3-4
4- 5	-	-	1001	1008	959	-	-	4-5
5- 6	-	-	1021	1013	974	-	-	5-6
6- 7	-	-	615	568	570	-	-	6-7
7- 8	-	-	355	358	396	-	-	7-8
8- 9	-	-	248	270	266	-	-	8-9
9-10	-	-	218	234	213	-	-	9-10
10-11	-	-	130	142	159	-	-	10-11
11-12	-	-	78	86	101	-	-	11-12
TOTAL	0	0	3666	11003	11035	4553	0	TOTAL

AUTOMATIC TRAFFIC RECORDER COUNT - - SUMMARY

FOR: CENTRAL TRANSPORTATION PLANNING STAFF
BY: NORTHEAST TRAFFIC COUNTS
FILE: HAN-WAL-10 L-57 L:52 #260

LOCATION: WALTHAM STREET
10 SOUTH OF TROPELO ROAD

CITY/TOWN: WALTHAM, MASSACHUSETTS

DATE: OCTOBER, 1989

TOTAL HOURLY TRAFFIC VOLUMES

	SUN	MON	TUE 10/10	WED 10/11	THUR 10/12	FRI 10/13	SAT	
12- 1A	-	-	-	137	145	187	-	12-1 A
1- 2	-	-	-	58	76	108	-	1-2
2- 3	-	-	-	30	34	69	-	2-3
3- 4	-	-	-	31	27	45	-	3-4
4- 5	-	-	-	36	38	36	-	4-5
5- 6	-	-	-	153	145	158	-	5-6
6- 7	-	-	-	603	644	488	-	6-7
7- 8	-	-	-	1327	1283	1173	-	7-8
8- 9	-	-	-	1567	1404	1554	-	8-9
9-10	-	-	-	1272	1282	1281	-	9-10
10-11	-	-	-	1123	1124	1230	-	10-11
11-12	-	-	-	1348	1193	1396	-	11-12
12- 1P	-	-	-	1687	1383	1446	-	12-1 P
1- 2	-	-	-	1575	1542	1344	-	1-2
2- 3	-	-	-	1309	1335	-	-	2-3
3- 4	-	-	-	1508	1566	-	-	3-4
						-	-	
4- 5	-	-	-	1501	1575	-	-	4-5
5- 6	-	-	1706	1841	1865	-	-	5-6
6- 7	-	-	1614	1594	1666	-	-	6-7
7- 8	-	-	1174	1466	1391	-	-	7-8
						-	-	
8- 9	-	-	970	1011	1154	-	-	8-9
9-10	-	-	939	915	984	-	-	9-10
10-11	-	-	645	654	644	-	-	10-11
11-12	-	-	289	301	435	-	-	11-12
TOTAL	0	0	7337	23047	22935	10515	0	TOTAL

AUTOMATIC TRAFFIC RECORDER COUNT - - SUMMARY

FOR: CENTRAL TRANSPORTATION PLANNING STAFF
BY: NORTHEAST TRAFFIC COUNTS
FILE: HAN-WAL-11 L-57 L:52 #260

LOCATION: WYMAN STREET
11 SOUTH OF TROPELO ROAD

CITY/TOWN: WALTHAM, MASSACHUSETTS

DATE: OCTOBER, 1989

TOTAL HOURLY TRAFFIC VOLUMES

	SUN	MON	TUE 10/10	WED 10/11	THUR 10/12	FRI 10/13	SAT	
12- 1A	-	-	-	29	32	59	-	12-1 A
1- 2	-	-	-	18	16	18	-	1-2
2- 3	-	-	-	12	10	23	-	2-3
3- 4	-	-	-	22	20	19	-	3-4
4- 5	-	-	-	33	35	29	-	4-5
5- 6	-	-	-	216	225	209	-	5-6
6- 7	-	-	-	571	546	614	-	6-7
7- 8	-	-	-	1243	1201	1092	-	7-8
8- 9	-	-	-	1142	1021	982	-	8-9
9-10	-	-	-	485	504	464	-	9-10
10-11	-	-	-	398	406	397	-	10-11
11-12	-	-	-	611	633	647	-	11-12
12- 1P	-	-	-	669	744	-	-	12-1 P
1- 2	-	-	-	562	637	-	-	1-2
2- 3	-	-	-	598	624	-	-	2-3
3- 4	-	-	-	715	743	-	-	3-4
						-	-	
4- 5	-	-	1001	1008	959	-	-	4-5
5- 6	-	-	1021	1013	974	-	-	5-6
6- 7	-	-	615	568	570	-	-	6-7
7- 8	-	-	355	358	396	-	-	7-8
						-	-	
8- 9	-	-	248	270	266	-	-	8-9
9-10	-	-	218	234	213	-	-	9-10
10-11	-	-	130	142	159	-	-	10-11
11-12	-	-	78	86	101	-	-	11-12
TOTAL	0	0	3666	11003	11035	4553	0	TOTAL

AUTOMATIC TRAFFIC RECORDER COUNT - - SUMMARY

FOR: CENTRAL TRANSPORTATION PLANNING STAFF
BY: NORTHEAST TRAFFIC COUNTS
FILE: HAN-WAL-12 L-57 L:52 #260

LOCATION: WINTER STREET
12 AT LINCOLN/WALTHAM TOWN LINE

CITY/TOWN: LINCOLN/WALTHAM, MASSACHUSETTS

DATE: OCTOBER, 1989

TOTAL HOURLY TRAFFIC VOLUMES

	SUN	MON	TUE 10/10	WED 10/11	THUR 10/12	FRI 10/13	SAT	
12- 1A	-	-	-	1	3	1	-	12-1 A
1- 2	-	-	-	1	0	1	-	1-2
2- 3	-	-	-	2	0	2	-	2-3
3- 4	-	-	-	2	1	4	-	3-4
4- 5	-	-	-	1	2	2	-	4-5
5- 6	-	-	-	0	0	2	-	5-6
6- 7	-	-	-	10	13	11	-	6-7
7- 8	-	-	-	19	26	22	-	7-8
8- 9	-	-	-	33	36	30	-	8-9
9-10	-	-	-	31	32	40	-	9-10
10-11	-	-	-	37	29	45	-	10-11
11-12	-	-	-	64	77	88	-	11-12
12- 1P	-	-	-	85	101	104	-	12-1 P
1- 2	-	-	-	67	68	76	-	1-2
2- 3	-	-	-	53	72	73	-	2-3
3- 4	-	-	-	118	120	-	-	3-4
4- 5	-	-	-	144	167	-	-	4-5
5- 6	-	-	252	285	271	-	-	5-6
6- 7	-	-	131	116	88	-	-	6-7
7- 8	-	-	52	49	43	-	-	7-8
8- 9	-	-	29	24	22	-	-	8-9
9-10	-	-	18	17	11	-	-	9-10
10-11	-	-	13	10	11	-	-	10-11
11-12	-	-	9	10	7	-	-	11-12
TOTAL	0	0	504	1179	1200	501	0	TOTAL

AUTOMATIC TRAFFIC RECORDER COUNT - - SUMMARY

FOR: CENTRAL TRANSPORTATION PLANNING STAFF
BY: NORTHEAST TRAFFIC COUNTS
FILE: HAN-WES-13 L-57 L:52 #260

LOCATION: ROUTE 117
13 EAST OF CONANT STREET

CITY/TOWN: WESTON, MASSACHUSETTS

DATE: OCTOBER, 1989

TOTAL HOURLY TRAFFIC VOLUMES

	SUN	MON	TUE 10/10	WED 10/11	THUR 10/12	FRI 10/13	SAT	
12- 1A	-	-	-	44	60	74	-	12-1 A
1- 2	-	-	-	15	23	22	-	1-2
2- 3	-	-	-	8	9	22	-	2-3
3- 4	-	-	-	6	7	5	-	3-4
4- 5	-	-	-	13	15	18	-	4-5
5- 6	-	-	-	78	106	163	-	5-6
6- 7	-	-	-	483	499	471	-	6-7
7- 8	-	-	-	1094	1177	1057	-	7-8
8- 9	-	-	-	1199	1236	1255	-	8-9
9-10	-	-	-	563	582	695	-	9-10
10-11	-	-	-	443	492	501	-	10-11
11-12	-	-	-	456	394	526	-	11-12
12- 1P	-	-	-	480	474	563	-	12-1 P
1- 2	-	-	-	425	459	484	-	1-2
2- 3	-	-	449	529	554	563	-	2-3
3- 4	-	-	688	746	728	-	-	3-4
4- 5	-	-	943	947	980	-	-	4-5
5- 6	-	-	1186	1186	1232	-	-	5-6
6- 7	-	-	837	818	808	-	-	6-7
7- 8	-	-	479	480	468	-	-	7-8
8- 9	-	-	263	295	318	-	-	8-9
9-10	-	-	216	277	304	-	-	9-10
10-11	-	-	185	212	218	-	-	10-11
11-12	-	-	97	124	137	-	-	11-12
TOTAL	0	0	5343	10921	11280	6419	0	TOTAL

AUTOMATIC TRAFFIC RECORDER COUNT - - SUMMARY

FOR: CENTRAL TRANSPORTATION PLANNING STAFF
BY: NORTHEAST TRAFFIC COUNTS
FILE: HAN-WES-14 L-57 L:52 #260

LOCATION: CONANT ROAD
14 SOUTH OF ROUTE 117

CITY/TOWN: WESTON, MASSACHUSETTS

DATE: OCTOBER, 1989

TOTAL HOURLY TRAFFIC VOLUMES

	SUN	MON 10/2	TUE 10/3	WED 10/4	THUR 10/5	FRI	SAT	
12- 1A	-	-	3	8	4	-	-	12-1 A
1- 2	-	-	1	1	0	-	-	1-2
2- 3	-	-	0	1	0	-	-	2-3
3- 4	-	-	0	0	2	-	-	3-4
4- 5	-	-	2	3	2	-	-	4-5
5- 6	-	-	2	2	3	-	-	5-6
6- 7	-	-	19	36	39	-	-	6-7
7- 8	-	-	100	130	124	-	-	7-8
8- 9	-	-	150	128	186	-	-	8-9
9-10	-	-	97	105	105	-	-	9-10
10-11	-	-	74	51	61	-	-	10-11
11-12	-	-	94	108	92	-	-	11-12
12- 1P	-	33	91	99	-	-	-	12-1 P
1- 2	-	63	70	70	-	-	-	1-2
2- 3	-	63	95	88	-	-	-	2-3
3- 4	-	79	98	82	-	-	-	3-4
4- 5	-	94	116	121	-	-	-	4-5
5- 6	-	110	140	134	-	-	-	5-6
6- 7	-	93	110	82	-	-	-	6-7
7- 8	-	59	54	99	-	-	-	7-8
8- 9	-	34	36	23	-	-	-	8-9
9-10	-	26	37	32	-	-	-	9-10
10-11	-	19	19	26	-	-	-	10-11
11-12	-	3	9	14	-	-	-	11-12
TOTAL	0	676	1417	1443	618	0	0	TOTAL

AUTOMATIC TRAFFIC RECORDER COUNT - - SUMMARY

FOR: CENTRAL TRANSPORTATION PLANNING STAFF
BY: NORTHEAST TRAFFIC COUNTS
FILE: HAN-WES-15 L-57 L:52 #260

LOCATION: MERRIAM STREET
15 SOUTH OF ROUTE 117

CITY/TOWN: WESTON, MASSACHUSETTS

DATE: OCTOBER, 1989

TOTAL HOURLY TRAFFIC VOLUMES

	SUN	MON	TUE	WED 10/4	THUR 10/5	FRI 10/6	SAT	
12- 1A	-	-	-	-	4	6	-	12-1 A
1- 2	-	-	-	-	0	0	-	1-2
2- 3	-	-	-	-	0	0	-	2-3
3- 4	-	-	-	-	0	1	-	3-4
4- 5	-	-	-	-	3	0	-	4-5
5- 6	-	-	-	-	5	3	-	5-6
6- 7	-	-	-	-	25	26	-	6-7
7- 8	-	-	-	-	109	106	-	7-8
8- 9	-	-	-	-	148	113	-	8-9
9-10	-	-	-	-	97	78	-	9-10
10-11	-	-	-	-	96	64	-	10-11
11-12	-	-	-	-	81	78	-	11-12
12- 1P	-	-	-	-	101	77	-	12-1 P
1- 2	-	-	-	-	69	74	-	1-2
2- 3	-	-	-	80	70	86	-	2-3
3- 4	-	-	-	93	86	106	-	3-4
4- 5	-	-	-	95	126	152	-	4-5
5- 6	-	-	-	130	116	149	-	5-6
6- 7	-	-	-	91	104	131	-	6-7
7- 8	-	-	-	48	57	47	-	7-8
8- 9	-	-	-	28	39	42	-	8-9
9-10	-	-	-	39	30	31	-	9-10
10-11	-	-	-	23	24	27	-	10-11
11-12	-	-	-	8	9	13	-	11-12
TOTAL	0	0	0	635	1399	1410	0	TOTAL

AUTOMATIC TRAFFIC RECORDER COUNT - - SUMMARY

FOR: CENTRAL TRANSPORTATION PLANNING STAFF
BY: NORTHEAST TRAFFIC COUNTS
FILE: HAN-SUD-16 L-57 L:52 #260

LOCATION: LINCOLN ROAD
16 SOUTH OF OLD SUDBURY ROAD

CITY/TOWN: SUDBURY, MASSACHUSETTS

DATE: OCTOBER, 1989

TOTAL HOURLY TRAFFIC VOLUMES

	SUN	MON 10/2	TUE 10/3	WED 10/4	THUR 10/5	FRI	SAT	
12- 1A	-	-	0	0	0	-	-	12-1 A
1- 2	-	-	0	0	0	-	-	1-2
2- 3	-	-	0	0	0	-	-	2-3
3- 4	-	-	0	0	0	-	-	3-4
4- 5	-	-	0	0	0	-	-	4-5
5- 6	-	-	1	0	0	-	-	5-6
6- 7	-	-	2	0	0	-	-	6-7
7- 8	-	-	16	1	0	-	-	7-8
8- 9	-	-	19	17	0	-	-	8-9
9-10	-	-	11	22	12	-	-	9-10
10-11	-	-	9	7	18	-	-	10-11
11-12	-	-	17	10	14	-	-	11-12
12- 1P	-	9	12	10	-	-	-	12-1 P
1- 2	-	9	9	12	-	-	-	1-2
2- 3	-	15	11	8	-	-	-	2-3
3- 4	-	21	16	13	-	-	-	3-4
4- 5	-	19	14	12	-	-	-	4-5
5- 6	-	16	16	23	-	-	-	5-6
6- 7	-	14	18	11	-	-	-	6-7
7- 8	-	8	19	16	-	-	-	7-8
8- 9	-	2	7	6	-	-	-	8-9
9-10	-	4	8	3	-	-	-	9-10
10-11	-	4	6	3	-	-	-	10-11
11-12	-	1	0	0	-	-	-	11-12
TOTAL	0	122	211	174	44	0	0	TOTAL

AUTOMATIC TRAFFIC RECORDER COUNT - - SUMMARY

FOR: CENTRAL TRANSPORTATION PLANNING STAFF
BY: NORTHEAST TRAFFIC COUNTS
FILE: HAN-SUD-17 L-57 L:52 #260

LOCATION: CONCORD ROAD (ROUTE 126)
17 SOUTH OF OLD SUDBURY ROAD

CITY/TOWN: SUDBURY, MASSACHUSETTS

DATE: OCTOBER, 1989

TOTAL HOURLY TRAFFIC VOLUMES

	SUN	MON 10/2	TUE 10/3	WED 10/4	THUR 10/5	FRI	SAT	
12- 1A	-	-	21	15	21	-	-	12-1 A
1- 2	-	-	16	13	12	-	-	1-2
2- 3	-	-	4	5	3	-	-	2-3
3- 4	-	-	4	6	2	-	-	3-4
4- 5	-	-	11	4	6	-	-	4-5
5- 6	-	-	28	38	38	-	-	5-6
6- 7	-	-	257	244	266	-	-	6-7
7- 8	-	-	972	985	969	-	-	7-8
8- 9	-	-	935	878	1011	-	-	8-9
9-10	-	-	433	435	459	-	-	9-10
10-11	-	-	347	297	319	-	-	10-11
11-12	-	-	363	323	389	-	-	11-12
12- 1P	-	285	381	352	-	-	-	12-1 P
1- 2	-	283	356	370	-	-	-	1-2
2- 3	-	370	400	420	-	-	-	2-3
3- 4	-	469	520	520	-	-	-	3-4
4- 5	-	670	709	725	-	-	-	4-5
5- 6	-	918	957	865	-	-	-	5-6
6- 7	-	639	596	533	-	-	-	6-7
7- 8	-	259	288	295	-	-	-	7-8
8- 9	-	133	162	163	-	-	-	8-9
9-10	-	138	179	188	-	-	-	9-10
10-11	-	85	97	100	-	-	-	10-11
11-12	-	40	47	67	-	-	-	11-12
TOTAL	0	4289	8083	7841	3495	0	0	TOTAL

AUTOMATIC TRAFFIC RECORDER COUNT - - SUMMARY

FOR: CENTRAL TRANSPORTATION PLANNING STAFF
BY: NORTHEAST TRAFFIC COUNTS
FILE: HAN-CON-18 L-57 L:52 #260

LOCATION: CONCORD ROAD
18 AT CONCORD/SUDBURY TOWN LINE

CITY/TOWN: CONCORD/SUDBURY, MASSACHUSETTS

DATE: OCTOBER, 1989

TOTAL HOURLY TRAFFIC VOLUMES

	SUN	MON 10/2	TUE 10/3	WED 10/4	THUR 10/5	FRI	SAT	
12- 1A	-	-	8	12	15	-	-	12-1 A
1- 2	-	-	3	4	7	-	-	1-2
2- 3	-	-	3	5	2	-	-	2-3
3- 4	-	-	0	2	2	-	-	3-4
4- 5	-	-	3	3	3	-	-	4-5
5- 6	-	-	26	24	23	-	-	5-6
6- 7	-	-	163	147	169	-	-	6-7
7- 8	-	-	504	474	494	-	-	7-8
8- 9	-	-	388	361	366	-	-	8-9
9-10	-	-	192	213	222	-	-	9-10
10-11	-	-	162	211	163	-	-	10-11
11-12	-	-	171	181	159	-	-	11-12
12- 1P	-	179	190	193	-	-	-	12-1 P
1- 2	-	137	188	177	-	-	-	1-2
2- 3	-	191	246	265	-	-	-	2-3
3- 4	-	251	315	294	-	-	-	3-4
4- 5	-	339	361	355	-	-	-	4-5
5- 6	-	424	484	482	-	-	-	5-6
6- 7	-	359	310	323	-	-	-	6-7
7- 8	-	132	155	176	-	-	-	7-8
8- 9	-	77	91	98	-	-	-	8-9
9-10	-	74	91	108	-	-	-	9-10
10-11	-	45	53	68	-	-	-	10-11
11-12	-	34	28	38	-	-	-	11-12
TOTAL	0	2242	4135	4214	1625	0	0	TOTAL

AUTOMATIC TRAFFIC RECORDER COUNT - - SUMMARY

FOR: CENTRAL TRANSPORTATION PLANNING STAFF
BY: NORTHEAST TRAFFIC COUNTS
FILE: HAN-CON-19 L-57 L:52 #260

LOCATION: ROUTE 117 (NORTH ROAD)
19 AT CONCORD/SUDBURY TOWN LINE

CITY/TOWN: CONCORD/SUDBURY, MASSACHUSETTS

DATE: OCTOBER, 1989

TOTAL HOURLY TRAFFIC VOLUMES

	SUN	MON 10/16	TUE 10/17	WED 10/18	THUR 10/19	FRI	SAT	
12- 1A	-	-	21	33	28	-	-	12-1 A
1- 2	-	-	14	13	14	-	-	1-2
2- 3	-	-	7	7	7	-	-	2-3
3- 4	-	-	7	9	7	-	-	3-4
4- 5	-	-	12	17	15	-	-	4-5
5- 6	-	-	137	165	161	-	-	5-6
6- 7	-	-	698	686	659	-	-	6-7
7- 8	-	-	1192	1026	1157	-	-	7-8
8- 9	-	-	886	870	-	-	-	8-9
9-10	-	-	431	444	-	-	-	9-10
10-11	-	-	307	362	-	-	-	10-11
11-12	-	-	342	379	-	-	-	11-12
12- 1P	-	-	401	388	-	-	-	12-1 P
1- 2	-	-	410	402	-	-	-	1-2
2- 3	-	-	404	412	-	-	-	2-3
3- 4	-	-	566	571	-	-	-	3-4
4- 5	-	-	745	761	-	-	-	4-5
5- 6	-	1073	928	1014	-	-	-	5-6
6- 7	-	525	657	657	-	-	-	6-7
7- 8	-	269	295	248	-	-	-	7-8
8- 9	-	207	225	226	-	-	-	8-9
9-10	-	183	190	196	-	-	-	9-10
10-11	-	144	164	158	-	-	-	10-11
11-12	-	68	54	63	-	-	-	11-12
TOTAL	0	2469	9093	9107	2048	0	0	TOTAL

AUTOMATIC TRAFFIC RECORDER COUNT - - SUMMARY

FOR: CENTRAL TRANSPORTATION PLANNING STAFF
BY: NORTHEAST TRAFFIC COUNTS
FILE: HAN-CON-20 L-57 L:52 #260

LOCATION: DAKIN ROAD
20 AT CONCORD/SUDBURY TOWN LINE

CITY/TOWN: CONCORD/SUDBURY, MASSACHUSETTS

DATE: OCTOBER, 1989

TOTAL HOURLY TRAFFIC VOLUMES

	SUN	MON 10/2	TUE 10/3	WED 10/4	THUR 10/5	FRI	SAT	
12- 1A	-	-	9	10	3	-	-	12-1 A
1- 2	-	-	0	0	0	-	-	1-2
2- 3	-	-	0	2	0	-	-	2-3
3- 4	-	-	2	3	3	-	-	3-4
4- 5	-	-	1	0	0	-	-	4-5
5- 6	-	-	11	20	15	-	-	5-6
6- 7	-	-	85	93	87	-	-	6-7
7- 8	-	-	222	235	230	-	-	7-8
8- 9	-	-	222	151	167	-	-	8-9
9-10	-	-	104	111	123	-	-	9-10
10-11	-	-	84	82	80	-	-	10-11
11-12	-	53	115	84	98	-	-	11-12
12- 1P	-	72	105	81	-	-	-	12-1 P
1- 2	-	92	81	102	-	-	-	1-2
2- 3	-	108	105	90	-	-	-	2-3
3- 4	-	156	166	155	-	-	-	3-4
4- 5	-	160	172	169	-	-	-	4-5
5- 6	-	207	211	197	-	-	-	5-6
6- 7	-	149	125	185	-	-	-	6-7
7- 8	-	101	89	91	-	-	-	7-8
8- 9	-	64	41	76	-	-	-	8-9
9-10	-	55	49	37	-	-	-	9-10
10-11	-	34	30	30	-	-	-	10-11
11-12	-	13	18	18	-	-	-	11-12
TOTAL	0	1264	2047	2022	806	0	0	TOTAL

AUTOMATIC TRAFFIC RECORDER COUNT - - SUMMARY

FOR: CENTRAL TRANSPORTATION PLANNING STAFF
BY: NORTHEAST TRAFFIC COUNTS
FILE: HAN-CON-21 L-57 L:52 #260

LOCATION: POWERS ROAD
21 AT CONCORD/SUDBURY TOWN LINE

CITY/TOWN: CONCORD/SUDBURY, MASSACHUSETTS

DATE: OCTOBER, 1989

TOTAL HOURLY TRAFFIC VOLUMES

	SUN	MON 10/2	TUE 10/3	WED 10/4	THUR 10/5	FRI	SAT	
12- 1A	-	-	4	1	4	-	-	12-1 A
1- 2	-	-	0	0	1	-	-	1-2
2- 3	-	-	0	1	0	-	-	2-3
3- 4	-	-	0	0	0	-	-	3-4
4- 5	-	-	0	1	0	-	-	4-5
5- 6	-	-	9	5	7	-	-	5-6
6- 7	-	-	26	23	28	-	-	6-7
7- 8	-	-	97	96	88	-	-	7-8
8- 9	-	-	108	104	78	-	-	8-9
9-10	-	-	37	54	45	-	-	9-10
10-11	-	-	37	28	37	-	-	10-11
11-12	-	35	26	44	29	-	-	11-12
12- 1P	-	42	50	41	-	-	-	12-1 P
1- 2	-	28	36	38	-	-	-	1-2
2- 3	-	35	47	57	-	-	-	2-3
3- 4	-	56	47	59	-	-	-	3-4
4- 5	-	71	70	68	-	-	-	4-5
5- 6	-	54	82	77	-	-	-	5-6
6- 7	-	59	64	85	-	-	-	6-7
7- 8	-	38	48	44	-	-	-	7-8
8- 9	-	36	38	53	-	-	-	8-9
9-10	-	26	29	17	-	-	-	9-10
10-11	-	8	19	16	-	-	-	10-11
11-12	-	5	9	11	-	-	-	11-12
TOTAL	0	493	883	923	317	0	0	TOTAL

AUTOMATIC TRAFFIC RECORDER COUNT - - SUMMARY

FOR: CENTRAL TRANSPORTATION PLANNING STAFF
BY: NORTHEAST TRAFFIC COUNTS
FILE: HAN-CON-22 L-57 L:52 #260

LOCATION: ROUTE 62 (MAIN STREET)
22 AT CONCORD/ACTON TOWN LINE

CITY/TOWN: CONCORD/ACTON, MASSACHUSETTS

DATE: OCTOBER, 1989

TOTAL HOURLY TRAFFIC VOLUMES

	SUN	MON 10/2	TUE 10/3	WED 10/4	THUR 10/5	FRI	SAT	
12- 1A	-	-	103	90	92	-	-	12-1 A
1- 2	-	-	23	14	38	-	-	1-2
2- 3	-	-	20	18	20	-	-	2-3
3- 4	-	-	26	15	23	-	-	3-4
4- 5	-	-	31	35	33	-	-	4-5
5- 6	-	-	138	140	129	-	-	5-6
6- 7	-	-	491	492	469	-	-	6-7
7- 8	-	-	988	1012	1002	-	-	7-8
8- 9	-	-	938	977	1041	-	-	8-9
9-10	-	-	696	718	716	-	-	9-10
10-11	-	-	677	640	715	-	-	10-11
11-12	-	758	748	790	803	-	-	11-12
12- 1P	-	845	861	868	-	-	-	12-1 P
1- 2	-	762	775	782	-	-	-	1-2
2- 3	-	777	750	768	-	-	-	2-3
3- 4	-	914	950	944	-	-	-	3-4
4- 5	-	1090	1137	1103	-	-	-	4-5
5- 6	-	959	1078	1064	-	-	-	5-6
6- 7	-	681	792	781	-	-	-	6-7
7- 8	-	514	579	571	-	-	-	7-8
8- 9	-	352	386	417	-	-	-	8-9
9-10	-	251	382	283	-	-	-	9-10
10-11	-	219	264	225	-	-	-	10-11
11-12	-	141	124	154	-	-	-	11-12
TOTAL	0	8263	12957	12901	5081	0	0	TOTAL

AUTOMATIC TRAFFIC RECORDER COUNT - - SUMMARY

FOR: CENTRAL TRANSPORTATION PLANNING STAFF
BY: NORTHEAST TRAFFIC COUNTS
FILE: HAN-CON-23 L-57 L:52 #260

LOCATION: LAWS BROOK ROAD
23 AT CONCORD/ACTON TOWN LINE

CITY/TOWN: CONCORD/ACTON, MASSACHUSETTS

DATE: OCTOBER, 1989

TOTAL HOURLY TRAFFIC VOLUMES

	SUN	MON 10/2	TUE 10/3	WED 10/4	THUR 10/5	FRI	SAT	
12- 1A	-	-	14	15	32	-	-	12-1 A
1- 2	-	-	7	7	3	-	-	1-2
2- 3	-	-	1	4	3	-	-	2-3
3- 4	-	-	2	5	8	-	-	3-4
4- 5	-	-	10	6	10	-	-	4-5
5- 6	-	-	22	25	23	-	-	5-6
6- 7	-	-	183	179	177	-	-	6-7
7- 8	-	-	506	457	400	-	-	7-8
8- 9	-	-	348	300	300	-	-	8-9
9-10	-	-	169	210	187	-	-	9-10
10-11	-	-	138	166	167	-	-	10-11
11-12	-	171	211	194	194	-	-	11-12
12- 1P	-	215	235	198	-	-	-	12-1 P
1- 2	-	179	203	213	-	-	-	1-2
2- 3	-	224	210	207	-	-	-	2-3
3- 4	-	260	252	268	-	-	-	3-4
4- 5	-	300	310	294	-	-	-	4-5
5- 6	-	366	377	419	-	-	-	5-6
6- 7	-	273	234	288	-	-	-	6-7
7- 8	-	139	194	159	-	-	-	7-8
8- 9	-	110	124	115	-	-	-	8-9
9-10	-	75	102	133	-	-	-	9-10
10-11	-	66	57	85	-	-	-	10-11
11-12	-	38	39	40	-	-	-	11-12
TOTAL	0	2416	3948	3987	1504	0	0	TOTAL

AUTOMATIC TRAFFIC RECORDER COUNT - - SUMMARY

FOR: CENTRAL TRANSPORTATION PLANNING STAFF
BY: NORTHEAST TRAFFIC COUNTS
FILE: HAN-CON-24 L-57 L:52 #260

LOCATION: ROUTE 2A
24 AT CONCORD/ACTON TOWN LINE

CITY/TOWN: CONCORD/ACTON, MASSACHUSETTS

DATE: OCTOBER, 1989

TOTAL HOURLY TRAFFIC VOLUMES

	SUN	MON 10/2	TUE 10/3	WED 10/4	THUR 10/5	FRI	SAT	
12- 1A	-	-	64	105	92	-	-	12-1 A
1- 2	-	-	25	46	40	-	-	1-2
2- 3	-	-	18	24	20	-	-	2-3
3- 4	-	-	12	16	12	-	-	3-4
4- 5	-	-	34	39	31	-	-	4-5
5- 6	-	-	158	164	180	-	-	5-6
6- 7	-	-	835	850	875	-	-	6-7
7- 8	-	-	1387	1504	1500	-	-	7-8
8- 9	-	-	1355	1404	1472	-	-	8-9
9-10	-	-	889	1060	906	-	-	9-10
10-11	-	-	859	943	943	-	-	10-11
11-12	-	864	939	1041	997	-	-	11-12
12- 1P	-	1003	1098	1241	-	-	-	12-1 P
1- 2	-	899	946	1069	-	-	-	1-2
2- 3	-	994	1085	1058	-	-	-	2-3
3- 4	-	1152	1231	1303	-	-	-	3-4
4- 5	-	1249	1323	1285	-	-	-	4-5
5- 6	-	1328	1457	1512	-	-	-	5-6
6- 7	-	1087	1181	1244	-	-	-	6-7
7- 8	-	681	826	862	-	-	-	7-8
8- 9	-	441	596	640	-	-	-	8-9
9-10	-	369	542	481	-	-	-	9-10
10-11	-	306	333	415	-	-	-	10-11
11-12	-	197	237	230	-	-	-	11-12
TOTAL	0	10570	17430	18536	7068	0	0	TOTAL

AUTOMATIC TRAFFIC RECORDER COUNT - - SUMMARY

FOR: CENTRAL TRANSPORTATION PLANNING STAFF
BY: NORTHEAST TRAFFIC COUNTS
FILE: HAN-CON-25 L-57 L:52 #260

LOCATION: STRAWBERRY HILL ROAD
25 AT CONCORD/ACTON TOWN LINE

CITY/TOWN: CONCORD/ACTON, MASSACHUSETTS

DATE: OCTOBER, 1989

TOTAL HOURLY TRAFFIC VOLUMES

	SUN	MON 10/2	TUE 10/3	WED 10/4	THUR 10/5	FRI	SAT	
12- 1A	-	-	0	3	0	-	-	12-1 A
1- 2	-	-	0	0	0	-	-	1-2
2- 3	-	-	0	0	0	-	-	2-3
3- 4	-	-	1	1	1	-	-	3-4
4- 5	-	-	2	0	2	-	-	4-5
5- 6	-	-	2	4	0	-	-	5-6
6- 7	-	-	14	20	25	-	-	6-7
7- 8	-	-	104	101	108	-	-	7-8
8- 9	-	-	145	152	142	-	-	8-9
9-10	-	-	39	38	-	-	-	9-10
10-11	-	-	52	35	-	-	-	10-11
11-12	-	60	53	56	-	-	-	11-12
12- 1P	-	46	93	62	-	-	-	12-1 P
1- 2	-	51	65	41	-	-	-	1-2
2- 3	-	46	80	53	-	-	-	2-3
3- 4	-	93	75	109	-	-	-	3-4
4- 5	-	100	75	81	-	-	-	4-5
5- 6	-	85	84	108	-	-	-	5-6
6- 7	-	33	56	64	-	-	-	6-7
7- 8	-	37	23	26	-	-	-	7-8
8- 9	-	5	24	30	-	-	-	8-9
9-10	-	8	13	17	-	-	-	9-10
10-11	-	19	6	7	-	-	-	10-11
11-12	-	0	2	4	-	-	-	11-12
TOTAL	0	583	1008	1012	278	0	0	TOTAL

AUTOMATIC TRAFFIC RECORDER COUNT - - SUMMARY

FOR: CENTRAL TRANSPORTATION PLANNING STAFF
BY: NORTHEAST TRAFFIC COUNTS
FILE: HAN-CON-26 L-57 L:52 #260

LOCATION: WEST ROAD
26 AT CONCORD/CARLISLE TOWN LINE

CITY/TOWN: CONCORD/CARLISLE, MASSACHUSETTS

DATE: OCTOBER, 1989

TOTAL HOURLY TRAFFIC VOLUMES

	SUN	MON 10/16	TUE 10/17	WED 10/18	THUR 10/19	FRI 10/20	SAT	
12- 1A	-	-	1	4	0	0	-	12-1 A
1- 2	-	-	1	0	0	1	-	1-2
2- 3	-	-	0	0	0	0	-	2-3
3- 4	-	-	0	3	0	0	-	3-4
4- 5	-	-	0	0	0	0	-	4-5
5- 6	-	-	4	7	4	5	-	5-6
6- 7	-	-	42	236	48	43	-	6-7
7- 8	-	-	96	228	109	105	-	7-8
8- 9	-	-	85	75	84	78	-	8-9
9-10	-	-	30	36	29	32	-	9-10
10-11	-	-	19	17	22	23	-	10-11
11-12	-	-	26	32	35	19	-	11-12
12- 1P	-	-	34	27	22	26	-	12-1 P
1- 2	-	-	17	29	18	21	-	1-2
2- 3	-	-	26	25	30	27	-	2-3
3- 4	-	-	29	42	36	40	-	3-4
4- 5	-	66	56	74	63	63	-	4-5
5- 6	-	76	94	93	92	95	-	5-6
6- 7	-	64	53	62	62	55	-	6-7
7- 8	-	41	21	24	33	20	-	7-8
8- 9	-	13	17	9	13	15	-	8-9
9-10	-	20	12	24	19	19	-	9-10
10-11	-	15	9	13	4	11	-	10-11
11-12	-	2	4	4	6	8	-	11-12
TOTAL	0	297	676	1064	729	706	0	TOTAL

AUTOMATIC TRAFFIC RECORDER COUNT - - SUMMARY

FOR: CENTRAL TRANSPORTATION PLANNING STAFF
BY: NORTHEAST TRAFFIC COUNTS
FILE: HAN-CON-27 L-57 L:52 #260

LOCATION: LOWELL ROAD
27 AT CONCORD/CARLISLE TOWN LINE

CITY/TOWN: CONCORD/CARLISLE, MASSACHUSETTS

DATE: OCTOBER, 1989

TOTAL HOURLY TRAFFIC VOLUMES

	SUN	MON 10/2	TUE 10/3	WED 10/4	THUR 10/5	FRI	SAT	
12- 1A	-	-	16	21	-	-	-	12-1 A
1- 2	-	-	3	11	-	-	-	1-2
2- 3	-	-	1	8	-	-	-	2-3
3- 4	-	-	1	2	-	-	-	3-4
4- 5	-	-	7	3	-	-	-	4-5
5- 6	-	-	27	24	-	-	-	5-6
6- 7	-	-	249	226	-	-	-	6-7
7- 8	-	-	605	-	-	-	-	7-8
8- 9	-	-	526	-	-	-	-	8-9
9-10	-	-	253	-	-	-	-	9-10
10-11	-	197	200	-	-	-	-	10-11
11-12	-	192	184	-	-	-	-	11-12
12- 1P	-	216	243	-	-	-	-	12-1 P
1- 2	-	495	202	-	-	-	-	1-2
2- 3	-	239	260	-	-	-	-	2-3
3- 4	-	341	286	-	-	-	-	3-4
4- 5	-	506	458	-	-	-	-	4-5
5- 6	-	537	611	-	-	-	-	5-6
6- 7	-	419	478	-	-	-	-	6-7
7- 8	-	217	285	-	-	-	-	7-8
8- 9	-	93	136	-	-	-	-	8-9
9-10	-	98	118	-	-	-	-	9-10
10-11	-	68	107	-	-	-	-	10-11
11-12	-	34	43	-	-	-	-	11-12
TOTAL	0	3652	5299	295	0	0	0	TOTAL

AUTOMATIC TRAFFIC RECORDER COUNT - - SUMMARY

FOR: CENTRAL TRANSPORTATION PLANNING STAFF
BY: NORTHEAST TRAFFIC COUNTS
FILE: HAN-BED-28 L-57 L:52 #260

LOCATION: BEDFORD ROAD (ROUTE 225)
28 SOUTH OF MAPLE STREET

CITY/TOWN: CARLISLE, MASSACHUSETTS

DATE: OCTOBER, 1989

TOTAL HOURLY TRAFFIC VOLUMES

	SUN	MON 10/2	TUE 10/3	WED 10/4	THUR 10/5	FRI	SAT	
12- 1A	-	-	15	23	-	-	-	12-1 A
1- 2	-	-	5	11	-	-	-	1-2
2- 3	-	-	0	7	-	-	-	2-3
3- 4	-	-	6	2	-	-	-	3-4
4- 5	-	-	10	10	-	-	-	4-5
5- 6	-	-	58	61	-	-	-	5-6
6- 7	-	-	420	478	-	-	-	6-7
7- 8	-	-	844	854	-	-	-	7-8
8- 9	-	-	684	586	-	-	-	8-9
9-10	-	-	320	290	-	-	-	9-10
10-11	-	186	246	264	-	-	-	10-11
11-12	-	268	290	278	-	-	-	11-12
12- 1P	-	238	321	332	-	-	-	12-1 P
1- 2	-	228	297	288	-	-	-	1-2
2- 3	-	295	338	382	-	-	-	2-3
3- 4	-	443	498	500	-	-	-	3-4
4- 5	-	760	797	811	-	-	-	4-5
5- 6	-	893	796	804	-	-	-	5-6
6- 7	-	488	484	472	-	-	-	6-7
7- 8	-	209	284	264	-	-	-	7-8
8- 9	-	130	156	174	-	-	-	8-9
9-10	-	100	132	170	-	-	-	9-10
10-11	-	83	82	81	-	-	-	10-11
11-12	-	36	43	55	-	-	-	11-12
TOTAL	0	4357	7126	7197	0	0	0	TOTAL

AUTOMATIC TRAFFIC RECORDER COUNT - - SUMMARY

FOR: CENTRAL TRANSPORTATION PLANNING STAFF
BY: NORTHEAST TRAFFIC COUNTS
FILE: HAN-BED-29 L-57 L:52 #260

LOCATION: DUDLEY ROAD
29 AT BEDFORD/BILLERICA TOWN LINE

CITY/TOWN: BEDFORD/BILLERICA, MASSACHUSETTS

DATE: OCTOBER, 1989

TOTAL HOURLY TRAFFIC VOLUMES

	SUN	MON 10/2	TUE 10/3	WED 10/4	THUR 10/5	FRI	SAT	
12- 1A	-	-	1	3	2	-	-	12-1 A
1- 2	-	-	0	0	0	-	-	1-2
2- 3	-	-	0	0	0	-	-	2-3
3- 4	-	-	1	0	1	-	-	3-4
4- 5	-	-	1	0	1	-	-	4-5
5- 6	-	-	5	4	3	-	-	5-6
6- 7	-	-	4	4	4	-	-	6-7
7- 8	-	-	3	4	3	-	-	7-8
8- 9	-	-	6	5	6	-	-	8-9
9-10	-	22	2	8	7	-	-	9-10
10-11	-	6	6	3	6	-	-	10-11
11-12	-	12	10	9	9	-	-	11-12
12- 1P	-	17	5	13	-	-	-	12-1 P
1- 2	-	14	20	6	-	-	-	1-2
2- 3	-	7	11	7	-	-	-	2-3
3- 4	-	12	6	5	-	-	-	3-4
4- 5	-	6	25	12	-	-	-	4-5
5- 6	-	6	10	11	-	-	-	5-6
6- 7	-	7	9	9	-	-	-	6-7
7- 8	-	3	7	8	-	-	-	7-8
8- 9	-	2	3	3	-	-	-	8-9
9-10	-	1	4	2	-	-	-	9-10
10-11	-	2	3	2	-	-	-	10-11
11-12	-	5	0	1	-	-	-	11-12
TOTAL	0	122	142	119	42	0	0	TOTAL

AUTOMATIC TRAFFIC RECORDER COUNT - - SUMMARY

FOR: CENTRAL TRANSPORTATION PLANNING STAFF
BY: NORTHEAST TRAFFIC COUNTS
FILE: HAN-BED-30 L-57 L:52 #260

LOCATION: NORTH ROAD (ROUTE 4)
30 AT BEDFORD/BILLERICA TOWN LINE

CITY/TOWN: BEDFORD/BILLERICA, MASSACHUSETTS

DATE: OCTOBER, 1989

TOTAL HOURLY TRAFFIC VOLUMES

	SUN	MON	TUE	WED 10/4	THUR 10/5	FRI 10/6	SAT	
12- 1A	-	-	-	-	42	25	-	12-1 A
1- 2	-	-	-	-	6	13	-	1-2
2- 3	-	-	-	-	5	3	-	2-3
3- 4	-	-	-	-	6	4	-	3-4
4- 5	-	-	-	-	11	13	-	4-5
5- 6	-	-	-	-	65	84	-	5-6
6- 7	-	-	-	-	681	687	-	6-7
7- 8	-	-	-	-	931	901	-	7-8
8- 9	-	-	-	-	727	542	-	8-9
9-10	-	-	-	-	240	229	-	9-10
10-11	-	-	-	-	178	199	-	10-11
11-12	-	-	-	-	241	231	-	11-12
12- 1P	-	-	-	-	223	272	-	12-1 P
1- 2	-	-	-	-	209	258	-	1-2
2- 3	-	-	-	-	257	306	-	2-3
3- 4	-	-	-	-	564	755	-	3-4
4- 5	-	-	-	1033	1000	1136	-	4-5
5- 6	-	-	-	946	887	1069	-	5-6
6- 7	-	-	-	422	409	689	-	6-7
7- 8	-	-	-	190	201	239	-	7-8
8- 9	-	-	-	126	130	108	-	8-9
9-10	-	-	-	114	107	99	-	9-10
10-11	-	-	-	75	69	77	-	10-11
11-12	-	-	-	48	63	77	-	11-12
TOTAL	0	0	0	2954	7252	8016	0	TOTAL

AUTOMATIC TRAFFIC RECORDER COUNT - - SUMMARY

FOR: CENTRAL TRANSPORTATION PLANNING STAFF
BY: NORTHEAST TRAFFIC COUNTS
FILE: HAN-BED-31 L-57 L:52 #260

LOCATION: OLD BILLERICA ROAD
31 AT BEDFORD/BILLERICA TOWN LINE

CITY/TOWN: BEDFORD/BILLERICA, MASSACHUSETTS

DATE: OCTOBER, 1989

TOTAL HOURLY TRAFFIC VOLUMES

	SUN	MON 10/16	TUE 10/17	WED 10/18	THUR 10/19	FRI	SAT	
12- 1A	-	-	13	25	23	-	-	12-1 A
1- 2	-	-	9	8	6	-	-	1-2
2- 3	-	-	2	0	1	-	-	2-3
3- 4	-	-	5	4	5	-	-	3-4
4- 5	-	-	8	6	4	-	-	4-5
5- 6	-	-	33	36	29	-	-	5-6
6- 7	-	-	196	192	207	-	-	6-7
7- 8	-	-	606	576	585	-	-	7-8
8- 9	-	-	637	670	-	-	-	8-9
9-10	-	-	264	404	-	-	-	9-10
10-11	-	-	216	190	-	-	-	10-11
11-12	-	-	262	232	-	-	-	11-12
12- 1P	-	330	313	314	-	-	-	12-1 P
1- 2	-	305	316	288	-	-	-	1-2
2- 3	-	245	319	264	-	-	-	2-3
3- 4	-	386	414	421	-	-	-	3-4
4- 5	-	752	785	805	-	-	-	4-5
5- 6	-	768	837	817	-	-	-	5-6
6- 7	-	278	369	320	-	-	-	6-7
7- 8	-	166	180	183	-	-	-	7-8
8- 9	-	123	99	182	-	-	-	8-9
9-10	-	116	81	94	-	-	-	9-10
10-11	-	53	64	81	-	-	-	10-11
11-12	-	54	59	66	-	-	-	11-12
TOTAL	0	3576	6087	6178	860	0	0	TOTAL

ATR's (by direction)

Location "#"

Concord

A. Route 2 east of rotary
B. Route 2A east of rotary
C. Route 2 west of Cambridge Turnpike

Lincoln

D. Route 2 east of Cambridge Turnpike Cutoff

Lexington

E. Mass. Ave. west of town green
F. Bedford St. north of Hancock St.

AUTOMATIC TRAFFIC RECORDER COUNT - - SUMMARY

FOR: CENTRAL TRANSPORTATION PLANNING STAFF
BY: NORTHEAST TRAFFIC COUNTS
FILE: HAN-CON-A L-57(178) L:56 #260

LOCATION: ROUTE 2
A EAST OF ROTARY

CITY/TOWN: CONCORD, MASSACHUSETTS

DATE: OCTOBER - NOVEMBER, 1989

TOTAL HOURLY TRAFFIC VOLUMES

	SUN	MON 10/30	TUE 10/31	WED 11/1	THUR 11/2	FRI	SAT	
12- 1A	-	-	204	229	229	-	-	12-1 A
1- 2	-	-	89	108	113	-	-	1-2
2- 3	-	-	59	74	67	-	-	2-3
3- 4	-	-	74	72	69	-	-	3-4
4- 5	-	-	146	133	141	-	-	4-5
5- 6	-	-	558	586	566	-	-	5-6
6- 7	-	-	2127	2145	2086	-	-	6-7
7- 8	-	-	2718	2927	2899	-	-	7-8
8- 9	-	-	2946	2868	2862	-	-	8-9
9-10	-	-	2003	2088	2147	-	-	9-10
10-11	-	-	1588	1727	-	-	-	10-11
11-12	-	1466	1610	1627	-	-	-	11-12
12- 1P	-	1541	1661	1754	-	-	-	12-1 P
1- 2	-	1679	1687	1740	-	-	-	1-2
2- 3	-	1844	1896	2044	-	-	-	2-3
3- 4	-	2376	2401	2357	-	-	-	3-4
4- 5	-	2650	2796	2781	-	-	-	4-5
5- 6	-	2925	3047	3056	-	-	-	5-6
6- 7	-	2291	1958	2407	-	-	-	6-7
7- 8	-	1311	1103	1475	-	-	-	7-8
8- 9	-	914	817	1082	-	-	-	8-9
9-10	-	786	761	985	-	-	-	9-10
10-11	-	674	582	822	-	-	-	10-11
11-12	-	424	433	511	-	-	-	11-12
TOTAL	0	20881	33264	35598	11179	0	0	TOTAL

AUTOMATIC TRAFFIC RECORDER COUNT - - SUMMARY

FOR: CENTRAL TRANSPORTATION PLANNING STAFF
BY: NORTHEAST TRAFFIC COUNTS
FILE: HAN-CON-A L-57(178) L:56 #260

LOCATION: ROUTE 2
A EAST OF ROTARY

CITY/TOWN: CONCORD, MASSACHUSETTS

DATE: OCTOBER - NOVEMBER, 1989

WESTBOUND TRAFFIC VOLUMES

	SUN	MON 10/30	TUE 10/31	WED 11/1	THUR 11/2	FRI	SAT	
12- 1A	-	-	133	147	170	-	-	12-1 A
1- 2	-	-	59	70	81	-	-	1-2
2- 3	-	-	29	43	37	-	-	2-3
3- 4	-	-	23	33	27	-	-	3-4
4- 5	-	-	39	33	50	-	-	4-5
5- 6	-	-	106	124	125	-	-	5-6
6- 7	-	-	594	543	543	-	-	6-7
7- 8	-	-	961	982	951	-	-	7-8
8- 9	-	-	1304	1247	1235	-	-	8-9
9-10	-	-	916	945	975	-	-	9-10
10-11	-	-	760	812	-	-	-	10-11
11-12	-	702	767	798	-	-	-	11-12
12- 1P	-	762	823	882	-	-	-	12-1 P
1- 2	-	845	869	851	-	-	-	1-2
2- 3	-	932	994	1050	-	-	-	2-3
3- 4	-	1254	1317	1279	-	-	-	3-4
4- 5	-	1545	1648	1597	-	-	-	4-5
5- 6	-	1665	1758	1664	-	-	-	5-6
6- 7	-	1318	1192	1420	-	-	-	6-7
7- 8	-	790	698	836	-	-	-	7-8
8- 9	-	584	510	672	-	-	-	8-9
9-10	-	508	473	642	-	-	-	9-10
10-11	-	413	359	571	-	-	-	10-11
11-12	-	281	302	342	-	-	-	11-12
TOTAL	0	11599	16634	17583	4194	0	0	TOTAL

AUTOMATIC TRAFFIC RECORDER COUNT - - SUMMARY

FOR: CENTRAL TRANSPORTATION PLANNING STAFF
BY: NORTHEAST TRAFFIC COUNTS
FILE: HAN-CON-A L-57(178) L:56 #260

LOCATION: ROUTE 2
A EAST OF ROTARY

CITY/TOWN: CONCORD, MASSACHUSETTS

DATE: OCTOBER - NOVEMBER, 1989

EASTBOUND TRAFFIC VOLUMES

	SUN	MON 10/30	TUE 10/31	WED 11/1	THUR 11/2	FRI	SAT	
12- 1A	-	-	71	82	59	-	-	12-1 A
1- 2	-	-	30	38	32	-	-	1-2
2- 3	-	-	30	31	30	-	-	2-3
3- 4	-	-	51	39	42	-	-	3-4
4- 5	-	-	107	100	91	-	-	4-5
5- 6	-	-	452	462	441	-	-	5-6
6- 7	-	-	1533	1602	1543	-	-	6-7
7- 8	-	-	1757	1945	1948	-	-	7-8
8- 9	-	-	1642	1621	1627	-	-	8-9
9-10	-	-	1087	1143	1172	-	-	9-10
10-11	-	-	828	915	-	-	-	10-11
11-12	-	764	843	829	-	-	-	11-12
12- 1P	-	779	838	872	-	-	-	12-1 P
1- 2	-	834	818	889	-	-	-	1-2
2- 3	-	912	902	994	-	-	-	2-3
3- 4	-	1122	1084	1078	-	-	-	3-4
4- 5	-	1105	1148	1184	-	-	-	4-5
5- 6	-	1260	1289	1392	-	-	-	5-6
6- 7	-	973	766	987	-	-	-	6-7
7- 8	-	521	405	639	-	-	-	7-8
8- 9	-	330	307	410	-	-	-	8-9
9-10	-	278	288	343	-	-	-	9-10
10-11	-	261	223	251	-	-	-	10-11
11-12	-	143	131	169	-	-	-	11-12
TOTAL	0	9282	16630	18015	6985	0	0	TOTAL

AUTOMATIC TRAFFIC RECORDER COUNT - - SUMMARY

FOR: CENTRAL TRANSPORTATION PLANNING STAFF
BY: NORTHEAST TRAFFIC COUNTS
FILE: HAN-CON-B L-57(178) L:52 #260

LOCATION: ROUTE 2A
B EAST OF ROTARY

CITY/TOWN: CONCORD, MASSACHUSETTS

DATE: OCTOBER - NOVEMBER, 1989

TOTAL HOURLY TRAFFIC VOLUMES

	SUN	MON 10/30	TUE 10/31	WED 11/1	THUR 11/2	FRI	SAT	
12- 1A	-	-	37	40	38	-	-	12-1 A
1- 2	-	-	5	22	14	-	-	1-2
2- 3	-	-	7	6	1	-	-	2-3
3- 4	-	-	4	3	10	-	-	3-4
4- 5	-	-	16	18	15	-	-	4-5
5- 6	-	-	64	75	67	-	-	5-6
6- 7	-	-	447	417	448	-	-	6-7
7- 8	-	-	909	986	991	-	-	7-8
8- 9	-	-	1003	922	939	-	-	8-9
9-10	-	-	704	616	582	-	-	9-10
10-11	-	-	516	483	-	-	-	10-11
11-12	-	559	576	560	-	-	-	11-12
12- 1P	-	548	606	627	-	-	-	12-1 P
1- 2	-	587	591	610	-	-	-	1-2
2- 3	-	616	655	639	-	-	-	2-3
3- 4	-	738	788	735	-	-	-	3-4
4- 5	-	963	1003	962	-	-	-	4-5
5- 6	-	988	1014	976	-	-	-	5-6
6- 7	-	610	541	688	-	-	-	6-7
7- 8	-	396	296	386	-	-	-	7-8
8- 9	-	235	233	256	-	-	-	8-9
9-10	-	202	223	282	-	-	-	9-10
10-11	-	133	153	170	-	-	-	10-11
11-12	-	84	84	79	-	-	-	11-12
TOTAL	0	6659	10475	10558	3105	0	0	TOTAL

AUTOMATIC TRAFFIC RECORDER COUNT - - SUMMARY

FOR: CENTRAL TRANSPORTATION PLANNING STAFF
BY: NORTHEAST TRAFFIC COUNTS
FILE: HAN-CON-B L-57(178) L:52 #260

LOCATION: ROUTE 2A
B EAST OF ROTARY

CITY/TOWN: CONCORD, MASSACHUSETTS

DATE: OCTOBER - NOVEMBER, 1989

EASTBOUND TRAFFIC VOLUMES

	SUN	MON 10/30	TUE 10/31	WED 11/1	THUR 11/2	FRI	SAT	
12- 1A	-	-	8	11	12	-	-	12-1 A
1- 2	-	-	2	3	3	-	-	1-2
2- 3	-	-	1	1	0	-	-	2-3
3- 4	-	-	2	3	4	-	-	3-4
4- 5	-	-	8	7	9	-	-	4-5
5- 6	-	-	44	47	46	-	-	5-6
6- 7	-	-	322	321	328	-	-	6-7
7- 8	-	-	603	639	686	-	-	7-8
8- 9	-	-	602	621	637	-	-	8-9
9-10	-	-	311	358	341	-	-	9-10
10-11	-	-	232	258	-	-	-	10-11
11-12	-	289	272	299	-	-	-	11-12
12- 1P	-	277	266	301	-	-	-	12-1 P
1- 2	-	275	264	296	-	-	-	1-2
2- 3	-	275	279	295	-	-	-	2-3
3- 4	-	298	301	289	-	-	-	3-4
4- 5	-	327	312	279	-	-	-	4-5
5- 6	-	327	322	326	-	-	-	5-6
6- 7	-	259	261	265	-	-	-	6-7
7- 8	-	169	188	193	-	-	-	7-8
8- 9	-	104	107	104	-	-	-	8-9
9-10	-	58	66	87	-	-	-	9-10
10-11	-	42	45	47	-	-	-	10-11
11-12	-	31	34	33	-	-	-	11-12
TOTAL	0	2731	4852	5083	2066	0	0	TOTAL

AUTOMATIC TRAFFIC RECORDER COUNT - - SUMMARY

FOR: CENTRAL TRANSPORTATION PLANNING STAFF
BY: NORTHEAST TRAFFIC COUNTS
FILE: HAN-CON-B L-57(178) L:52 #260

LOCATION: ROUTE 2A
B EAST OF ROTARY

CITY/TOWN: CONCORD, MASSACHUSETTS

DATE: OCTOBER - NOVEMBER, 1989

WESTBOUND TRAFFIC VOLUMES

	SUN	MON 10/30	TUE 10/31	WED 11/1	THUR 11/2	FRI	SAT	
12- 1A	-	-	29	29	26	-	-	12-1 A
1- 2	-	-	3	19	11	-	-	1-2
2- 3	-	-	6	5	1	-	-	2-3
3- 4	-	-	2	0	6	-	-	3-4
4- 5	-	-	8	11	6	-	-	4-5
5- 6	-	-	20	28	21	-	-	5-6
6- 7	-	-	125	96	120	-	-	6-7
7- 8	-	-	306	347	305	-	-	7-8
8- 9	-	-	401	301	302	-	-	8-9
9-10	-	-	393	258	241	-	-	9-10
10-11	-	-	284	225	-	-	-	10-11
11-12	-	270	304	261	-	-	-	11-12
12- 1P	-	271	340	326	-	-	-	12-1 P
1- 2	-	312	327	314	-	-	-	1-2
2- 3	-	341	376	344	-	-	-	2-3
3- 4	-	440	487	446	-	-	-	3-4
4- 5	-	636	691	683	-	-	-	4-5
5- 6	-	661	692	650	-	-	-	5-6
6- 7	-	351	280	423	-	-	-	6-7
7- 8	-	227	108	193	-	-	-	7-8
8- 9	-	131	126	152	-	-	-	8-9
9-10	-	144	157	195	-	-	-	9-10
10-11	-	91	108	123	-	-	-	10-11
11-12	-	53	50	46	-	-	-	11-12
TOTAL	0	3928	5623	5475	1039	0	0	TOTAL

AUTOMATIC TRAFFIC RECORDER COUNT - - SUMMARY

FOR: CENTRAL TRANSPORTATION PLANNING STAFF
BY: NORTHEAST TRAFFIC COUNTS
FILE: HAN-CON-C L-57(178) L:56 #260

LOCATION: ROUTE 2
C WEST OF CAMBRIDGE TURNPIKE

CITY/TOWN: CONCORD, MASSACHUSETTS

DATE: OCTOBER - NOVEMBER, 1989

TOTAL HOURLY TRAFFIC VOLUMES

	SUN	MON 10/30	TUE 10/31	WED 11/1	THUR 11/2	FRI	SAT	
12- 1A	-	-	253	290	279	-	-	12-1 A
1- 2	-	-	110	124	141	-	-	1-2
2- 3	-	-	68	89	77	-	-	2-3
3- 4	-	-	84	70	71	-	-	3-4
4- 5	-	-	131	146	147	-	-	4-5
5- 6	-	-	619	613	580	-	-	5-6
6- 7	-	-	2102	2225	2188	-	-	6-7
7- 8	-	-	3429	3499	3488	-	-	7-8
8- 9	-	-	3324	3339	3240	-	-	8-9
9-10	-	-	2248	2256	2296	-	-	9-10
10-11	-	-	1782	1786	-	-	-	10-11
11-12	-	-	1739	1866	-	-	-	11-12
12- 1P	-	1720	1857	1858	-	-	-	12-1 P
1- 2	-	1775	1827	1915	-	-	-	1-2
2- 3	-	2054	2137	2230	-	-	-	2-3
3- 4	-	2507	2612	2569	-	-	-	3-4
4- 5	-	3039	3213	3142	-	-	-	4-5
5- 6	-	3374	3476	3468	-	-	-	5-6
6- 7	-	2671	2274	2687	-	-	-	6-7
7- 8	-	1563	1337	1741	-	-	-	7-8
8- 9	-	1179	1018	1328	-	-	-	8-9
9-10	-	1097	1031	1293	-	-	-	9-10
10-11	-	808	746	1043	-	-	-	10-11
11-12	-	505	539	572	-	-	-	11-12
TOTAL	0	22292	37956	40149	12507	0	0	TOTAL

AUTOMATIC TRAFFIC RECORDER COUNT - - SUMMARY

FOR: CENTRAL TRANSPORTATION PLANNING STAFF
BY: NORTHEAST TRAFFIC COUNTS
FILE: HAN-CON-C L-57(178) L:56 #260

LOCATION: ROUTE 2
C WEST OF CAMBRIDGE TURNPIKE

CITY/TOWN: CONCORD, MASSACHUSETTS

DATE: OCTOBER - NOVEMBER, 1989

WESTBOUND TRAFFIC VOLUMES

	SUN	MON 10/30	TUE 10/31	WED 11/1	THUR 11/2	FRI	SAT	
12- 1A	-	-	135	180	187	-	-	12-1 A
1- 2	-	-	64	73	98	-	-	1-2
2- 3	-	-	34	50	45	-	-	2-3
3- 4	-	-	34	33	27	-	-	3-4
4- 5	-	-	42	52	62	-	-	4-5
5- 6	-	-	166	172	174	-	-	5-6
6- 7	-	-	721	724	725	-	-	6-7
7- 8	-	-	1291	1295	1273	-	-	7-8
8- 9	-	-	1349	1426	1361	-	-	8-9
9-10	-	-	969	1014	1037	-	-	9-10
10-11	-	-	804	836	-	-	-	10-11
11-12	-	982	834	952	-	-	-	11-12
12- 1P	-	869	928	898	-	-	-	12-1 P
1- 2	-	900	913	955	-	-	-	1-2
2- 3	-	1056	1121	1153	-	-	-	2-3
3- 4	-	1332	1429	1373	-	-	-	3-4
4- 5	-	1691	1859	1666	-	-	-	4-5
5- 6	-	1959	2014	1920	-	-	-	5-6
6- 7	-	1513	1318	1570	-	-	-	6-7
7- 8	-	927	829	1031	-	-	-	7-8
8- 9	-	739	611	806	-	-	-	8-9
9-10	-	694	646	813	-	-	-	9-10
10-11	-	513	470	689	-	-	-	10-11
11-12	-	319	346	364	-	-	-	11-12
TOTAL	0	13494	18927	20045	4989	0	0	TOTAL

AUTOMATIC TRAFFIC RECORDER COUNT - - SUMMARY

FOR: CENTRAL TRANSPORTATION PLANNING STAFF
BY: NORTHEAST TRAFFIC COUNTS
FILE: HAN-CON-C L-57(178) L:56 #260

LOCATION: ROUTE 2
C WEST OF CAMBRIDGE TURNPIKE

CITY/TOWN: CONCORD, MASSACHUSETTS

DATE: OCTOBER - NOVEMBER, 1989

EASTBOUND TRAFFIC VOLUMES

	SUN	MON 10/30	TUE 10/31	WED 11/1	THUR 11/2	FRI	SAT	
12- 1A	-	-	118	110	92	-	-	12-1 A
1- 2	-	-	46	51	43	-	-	1-2
2- 3	-	-	34	39	32	-	-	2-3
3- 4	-	-	50	37	44	-	-	3-4
4- 5	-	-	89	94	85	-	-	4-5
5- 6	-	-	453	441	406	-	-	5-6
6- 7	-	-	1381	1501	1463	-	-	6-7
7- 8	-	-	2138	2204	2215	-	-	7-8
8- 9	-	-	1975	1913	1879	-	-	8-9
9-10	-	-	1279	1242	1259	-	-	9-10
10-11	-	-	978	950	-	-	-	10-11
11-12	-	-	905	914	-	-	-	11-12
12- 1P	-	851	929	960	-	-	-	12-1 P
1- 2	-	875	914	960	-	-	-	1-2
2- 3	-	998	1016	1077	-	-	-	2-3
3- 4	-	1175	1183	1196	-	-	-	3-4
4- 5	-	1348	1354	1476	-	-	-	4-5
5- 6	-	1415	1462	1548	-	-	-	5-6
6- 7	-	1158	956	1117	-	-	-	6-7
7- 8	-	636	508	710	-	-	-	7-8
8- 9	-	440	407	522	-	-	-	8-9
9-10	-	403	385	480	-	-	-	9-10
10-11	-	295	276	354	-	-	-	10-11
11-12	-	186	193	208	-	-	-	11-12
TOTAL	0	9780	19029	20104	7518	0	0	TOTAL

AUTOMATIC TRAFFIC RECORDER COUNT - - SUMMARY

FOR: CENTRAL TRANSPORTATION PLANNING STAFF
BY: NORTHEAST TRAFFIC COUNTS
FILE: HAN-LN-D L-57(178) L:52 #260

LOCATION: ROUTE 2
D EAST OF CAMBRIDGE TURNPIKE CUTOFF

CITY/TOWN: LINCOLN, MASSACHUSETTS

DATE: SEPTEMBER, 1989

TOTAL HOURLY TRAFFIC VOLUMES

	SUN	MON	TUE	WED 9/27	THUR 9/28	FRI 9/29	SAT 9/30	
12- 1A	-	-	-	-	320	374	-	12-1 A
1- 2	-	-	-	-	125	211	-	1-2
2- 3	-	-	-	-	117	111	-	2-3
3- 4	-	-	-	-	101	116	-	3-4
4- 5	-	-	-	-	231	251	-	4-5
5- 6	-	-	-	-	997	1090	-	5-6
6- 7	-	-	-	-	2965	3090	-	6-7
7- 8	-	-	-	-	3976	4031	-	7-8
8- 9	-	-	-	-	3052	3074	-	8-9
9-10	-	-	-	-	2146	2229	-	9-10
10-11	-	-	-	-	2004	2014	-	10-11
11-12	-	-	-	-	2106	2118	-	11-12
12- 1P	-	-	-	-	2657	2315	-	12-1 P
1- 2	-	-	-	1830	2157	2529	-	1-2
2- 3	-	-	-	2448	2466	2715	-	2-3
3- 4	-	-	-	2858	2887	3277	-	3-4
4- 5	-	-	-	3401	3202	3369	-	4-5
5- 6	-	-	-	3951	3860	3640	-	5-6
6- 7	-	-	-	3383	3149	2976	-	6-7
7- 8	-	-	-	2071	2066	1764	-	7-8
8- 9	-	-	-	1730	1593	1317	-	8-9
9-10	-	-	-	1702	1514	1161	-	9-10
10-11	-	-	-	1303	1309	1160	-	10-11
11-12	-	-	-	722	760	774	-	11-12
TOTAL	0	0	0	25399	45760	45706	0	TOTAL

AUTOMATIC TRAFFIC RECORDER COUNT - - SUMMARY

FOR: CENTRAL TRANSPORTATION PLANNING STAFF
BY: NORTHEAST TRAFFIC COUNTS
FILE: HAN-LN-D L-57(178) L:52 #260

LOCATION: ROUTE 2
D EAST OF CAMBRIDGE TURNPIKE CUTOFF

CITY/TOWN: LINCOLN, MASSACHUSETTS

DATE: SEPTEMBER, 1989

EASTBOUND TRAFFIC VOLUMES

	SUN	MON	TUE	WED 9/27	THUR 9/28	FRI 9/29	SAT 9/30	
12- 1A	-	-	-	-	94	136	-	12-1 A
1- 2	-	-	-	-	42	87	-	1-2
2- 3	-	-	-	-	47	49	-	2-3
3- 4	-	-	-	-	44	45	-	3-4
4- 5	-	-	-	-	67	73	-	4-5
5- 6	-	-	-	-	296	295	-	5-6
6- 7	-	-	-	-	1279	1169	-	6-7
7- 8	-	-	-	-	2342	2262	-	7-8
8- 9	-	-	-	-	2075	1945	-	8-9
9-10	-	-	-	-	1316	1302	-	9-10
10-11	-	-	-	-	985	1031	-	10-11
11-12	-	-	-	-	995	1010	-	11-12
12- 1P	-	-	-	-	1014	1002	-	12-1 P
1- 2	-	-	-	919	944	1052	-	1-2
2- 3	-	-	-	1051	1062	1145	-	2-3
3- 4	-	-	-	1196	1270	1256	-	3-4
4- 5	-	-	-	1319	1306	1396	-	4-5
5- 6	-	-	-	1849	1509	1554	-	5-6
6- 7	-	-	-	1309	1438	1496	-	6-7
7- 8	-	-	-	812	944	998	-	7-8
8- 9	-	-	-	531	552	596	-	8-9
9-10	-	-	-	323	490	507	-	9-10
10-11	-	-	-	370	459	426	-	10-11
11-12	-	-	-	248	289	337	-	11-12
TOTAL	0	0	0	9927	20859	21169	0	TOTAL

AUTOMATIC TRAFFIC RECORDER COUNT - - SUMMARY

FOR: CENTRAL TRANSPORTATION PLANNING STAFF
BY: NORTHEAST TRAFFIC COUNTS
FILE: HAN-LN-D L-57(178) L:52 #260

LOCATION: ROUTE 2
D EAST OF CAMBRIDGE TURNPIKE CUTOFF

CITY/TOWN: LINCOLN, MASSACHUSETTS

DATE: SEPTEMBER, 1989

WESTBOUND TRAFFIC VOLUMES

	SUN	MON	TUE	WED 9/27	THUR 9/28	FRI 9/29	SAT 9/30	
12- 1A	-	-	-	-	226	238	-	12-1 A
1- 2	-	-	-	-	83	124	-	1-2
2- 3	-	-	-	-	70	62	-	2-3
3- 4	-	-	-	-	57	71	-	3-4
4- 5	-	-	-	-	164	178	-	4-5
5- 6	-	-	-	-	701	795	-	5-6
6- 7	-	-	-	-	1686	1921	-	6-7
7- 8	-	-	-	-	1634	1769	-	7-8
8- 9	-	-	-	-	977	1129	-	8-9
9-10	-	-	-	-	830	927	-	9-10
10-11	-	-	-	-	1019	983	-	10-11
11-12	-	-	-	-	1111	1108	-	11-12
12- 1P	-	-	-	-	1643	1313	-	12-1 P
1- 2	-	-	-	911	1213	1477	-	1-2
2- 3	-	-	-	1397	1404	1570	-	2-3
3- 4	-	-	-	1662	1617	2021	-	3-4
4- 5	-	-	-	2082	1896	1973	-	4-5
5- 6	-	-	-	2102	2351	2086	-	5-6
6- 7	-	-	-	2074	1711	1480	-	6-7
7- 8	-	-	-	1259	1122	766	-	7-8
8- 9	-	-	-	1199	1041	721	-	8-9
9-10	-	-	-	1379	1024	654	-	9-10
10-11	-	-	-	933	850	734	-	10-11
11-12	-	-	-	474	471	437	-	11-12
TOTAL	0	0	0	15472	24901	24537	0	TOTAL

AUTOMATIC TRAFFIC RECORDER COUNT - - SUMMARY

FOR: CENTRAL TRANSPORTATION PLANNING STAFF
BY: NORTHEAST TRAFFIC COUNTS
FILE: HAN-LEX-E L-57(178) L:52 #260

LOCATION: MASSACHUSETTS AVENUE
E WEST OF TOWN GREEN

CITY/TOWN: LEXINGTON, MASSACHUSETTS

DATE: OCTOBER - NOVEMBER, 1989

TOTAL HOURLY TRAFFIC VOLUMES

	SUN	MON 10/30	TUE 10/31	WED 11/1	THUR 11/2	FRI	SAT	
12- 1A	-	-	32	44	15	-	-	12-1 A
1- 2	-	-	11	10	8	-	-	1-2
2- 3	-	-	6	8	4	-	-	2-3
3- 4	-	-	0	3	3	-	-	3-4
4- 5	-	-	14	15	13	-	-	4-5
5- 6	-	-	59	49	40	-	-	5-6
6- 7	-	-	196	221	181	-	-	6-7
7- 8	-	-	741	736	681	-	-	7-8
8- 9	-	-	910	954	879	-	-	8-9
9-10	-	-	739	785	726	-	-	9-10
10-11	-	-	553	561	-	-	-	10-11
11-12	-	-	715	734	-	-	-	11-12
12- 1P	-	-	723	758	-	-	-	12-1 P
1- 2	-	-	724	628	-	-	-	1-2
2- 3	-	-	688	599	-	-	-	2-3
3- 4	-	-	878	787	-	-	-	3-4
4- 5	-	972	989	739	-	-	-	4-5
5- 6	-	1013	1160	788	-	-	-	5-6
6- 7	-	685	600	610	-	-	-	6-7
7- 8	-	588	494	507	-	-	-	7-8
8- 9	-	410	391	405	-	-	-	8-9
9-10	-	288	333	266	-	-	-	9-10
10-11	-	230	176	197	-	-	-	10-11
11-12	-	76	68	75	-	-	-	11-12
TOTAL	0	4262	11200	10479	2550	0	0	TOTAL

AUTOMATIC TRAFFIC RECORDER COUNT - - SUMMARY

FOR: CENTRAL TRANSPORTATION PLANNING STAFF
BY: NORTHEAST TRAFFIC COUNTS
FILE: HAN-LEX-E L-57(178) L:52 #260

LOCATION: MASSACHUSETTS AVENUE
E WEST OF TOWN GREEN

CITY/TOWN: LEXINGTON, MASSACHUSETTS

DATE: OCTOBER - NOVEMBER, 1989

WESTBOUND TRAFFIC VOLUMES

	SUN	MON 10/30	TUE 10/31	WED 11/1	THUR 11/2	FRI	SAT	
12- 1A	-	-	15	17	7	-	-	12-1 A
1- 2	-	-	3	7	4	-	-	1-2
2- 3	-	-	2	2	2	-	-	2-3
3- 4	-	-	0	1	0	-	-	3-4
4- 5	-	-	5	5	8	-	-	4-5
5- 6	-	-	21	27	27	-	-	5-6
6- 7	-	-	91	113	117	-	-	6-7
7- 8	-	-	358	367	412	-	-	7-8
8- 9	-	-	473	483	510	-	-	8-9
9-10	-	-	312	319	317	-	-	9-10
10-11	-	-	264	279	-	-	-	10-11
11-12	-	-	316	326	-	-	-	11-12
12- 1P	-	-	329	369	-	-	-	12-1 P
1- 2	-	-	370	352	-	-	-	1-2
2- 3	-	-	303	360	-	-	-	2-3
3- 4	-	-	392	419	-	-	-	3-4
4- 5	-	516	418	412	-	-	-	4-5
5- 6	-	418	456	386	-	-	-	5-6
6- 7	-	288	293	331	-	-	-	6-7
7- 8	-	259	237	308	-	-	-	7-8
8- 9	-	165	181	259	-	-	-	8-9
9-10	-	114	156	177	-	-	-	9-10
10-11	-	111	86	111	-	-	-	10-11
11-12	-	32	26	37	-	-	-	11-12
TOTAL	0	1903	5107	5467	1404	0	0	TOTAL

AUTOMATIC TRAFFIC RECORDER COUNT - - SUMMARY

FOR: CENTRAL TRANSPORTATION PLANNING STAFF
BY: NORTHEAST TRAFFIC COUNTS
FILE: HAN-LEX-E L-57(178) L:52 #260

LOCATION: MASSACHUSETTS AVENUE
E WEST OF TOWN GREEN

CITY/TOWN: LEXINGTON, MASSACHUSETTS

DATE: OCTOBER - NOVEMBER, 1989

EASTBOUND TRAFFIC VOLUMES

	SUN	MON 10/30	TUE 10/31	WED 11/1	THUR 11/2	FRI	SAT	
12- 1A	-	-	17	27	8	-	-	12-1 A
1- 2	-	-	8	3	4	-	-	1-2
2- 3	-	-	4	6	2	-	-	2-3
3- 4	-	-	0	2	3	-	-	3-4
4- 5	-	-	9	10	5	-	-	4-5
5- 6	-	-	38	22	13	-	-	5-6
6- 7	-	-	105	108	64	-	-	6-7
7- 8	-	-	383	369	269	-	-	7-8
8- 9	-	-	437	471	369	-	-	8-9
9-10	-	-	427	466	409	-	-	9-10
10-11	-	-	289	282	-	-	-	10-11
11-12	-	-	399	408	-	-	-	11-12
12- 1P	-	-	394	389	-	-	-	12-1 P
1- 2	-	-	354	276	-	-	-	1-2
2- 3	-	-	385	239	-	-	-	2-3
3- 4	-	-	486	368	-	-	-	3-4
4- 5	-	456	571	327	-	-	-	4-5
5- 6	-	595	704	402	-	-	-	5-6
6- 7	-	397	307	279	-	-	-	6-7
7- 8	-	329	257	199	-	-	-	7-8
8- 9	-	245	210	146	-	-	-	8-9
9-10	-	174	177	89	-	-	-	9-10
10-11	-	119	90	86	-	-	-	10-11
11-12	-	44	42	38	-	-	-	11-12
TOTAL	0	2359	6093	5012	1146	0	0	TOTAL

AUTOMATIC TRAFFIC RECORDER COUNT - - SUMMARY

FOR: CENTRAL TRANSPORTATION PLANNING STAFF
BY: NORTHEAST TRAFFIC COUNTS
FILE: HAN-LEX-F L-57(178) L:52 #260

LOCATION: BEDFORD STREET
F NORTH OF HANCOCK STREET

CITY/TOWN: LEXINGTON, MASSACHUSETTS

DATE: OCTOBER - NOVEMBER, 1989

TOTAL HOURLY TRAFFIC VOLUMES

	SUN	MON 10/30	TUE 10/30	WED 11/1	THUR 11/2	FRI	SAT	
12- 1A	-	-	49	75	54	-	-	12-1 A
1- 2	-	-	27	24	30	-	-	1-2
2- 3	-	-	18	12	14	-	-	2-3
3- 4	-	-	18	8	17	-	-	3-4
4- 5	-	-	35	44	29	-	-	4-5
5- 6	-	-	118	112	104	-	-	5-6
6- 7	-	-	379	441	368	-	-	6-7
7- 8	-	-	881	1036	832	-	-	7-8
8- 9	-	-	1204	1525	1355	-	-	8-9
9-10	-	-	1301	1362	1475	-	-	9-10
10-11	-	-	1148	1269	-	-	-	10-11
11-12	-	-	1298	1431	-	-	-	11-12
12- 1P	-	-	1392	1498	-	-	-	12-1 P
1- 2	-	-	1465	1416	-	-	-	1-2
2- 3	-	-	1350	1453	-	-	-	2-3
3- 4	-	-	1509	1522	-	-	-	3-4
4- 5	-	1197	1499	1526	-	-	-	4-5
5- 6	-	1210	1444	1350	-	-	-	5-6
6- 7	-	1017	986	1231	-	-	-	6-7
7- 8	-	914	762	1057	-	-	-	7-8
8- 9	-	607	634	771	-	-	-	8-9
9-10	-	452	526	551	-	-	-	9-10
10-11	-	221	250	290	-	-	-	10-11
11-12	-	115	149	146	-	-	-	11-12
TOTAL	0	5733	18442	20150	4278	0	0	TOTAL

AUTOMATIC TRAFFIC RECORDER COUNT - - SUMMARY

FOR: CENTRAL TRANSPORTATION PLANNING STAFF
BY: NORTHEAST TRAFFIC COUNTS
FILE: HAN-LEX-F L-57(178) L:52 #260

LOCATION: BEDFORD STREET
F NORTH OF HANCOCK STREET

CITY/TOWN: LEXINGTON, MASSACHUSETTS

DATE: OCTOBER - NOVEMBER, 1989

SOUTHBOUND TRAFFIC VOLUMES

	SUN	MON 10/30	TUE 10/30	WED 11/1	THUR 11/2	FRI	SAT	
12- 1A	-	-	22	32	32	-	-	12-1 A
1- 2	-	-	10	10	7	-	-	1-2
2- 3	-	-	8	5	4	-	-	2-3
3- 4	-	-	8	5	9	-	-	3-4
4- 5	-	-	15	12	8	-	-	4-5
5- 6	-	-	49	44	28	-	-	5-6
6- 7	-	-	130	137	130	-	-	6-7
7- 8	-	-	354	414	351	-	-	7-8
8- 9	-	-	468	637	486	-	-	8-9
9-10	-	-	529	677	549	-	-	9-10
10-11	-	-	502	611	-	-	-	10-11
11-12	-	-	585	720	-	-	-	11-12
12- 1P	-	-	606	673	-	-	-	12-1 P
1- 2	-	-	574	552	-	-	-	1-2
2- 3	-	-	555	567	-	-	-	2-3
3- 4	-	-	591	601	-	-	-	3-4
4- 5	-	577	616	635	-	-	-	4-5
5- 6	-	582	638	612	-	-	-	5-6
6- 7	-	512	391	486	-	-	-	6-7
7- 8	-	418	315	394	-	-	-	7-8
8- 9	-	267	241	281	-	-	-	8-9
9-10	-	225	189	206	-	-	-	9-10
10-11	-	91	96	117	-	-	-	10-11
11-12	-	46	54	65	-	-	-	11-12
TOTAL	0	2718	7546	8493	1604	0	0	TOTAL

AUTOMATIC TRAFFIC RECORDER COUNT - - SUMMARY

FOR: CENTRAL TRANSPORTATION PLANNING STAFF
BY: NORTHEAST TRAFFIC COUNTS
FILE: HAN-LEX-F L-57(178) L:52 #260

LOCATION: BEDFORD STREET
F NORTH OF HANCOCK STREET

CITY/TOWN: LEXINGTON, MASSACHUSETTS

DATE: OCTOBER - NOVEMBER, 1989

NORTHBOUND TRAFFIC VOLUMES

	SUN	MON	TUE	WED	THUR	FRI	SAT	
	0	10/30	10/30	11/1	11/2	0	0	
12- 1A	-	-	27	43	22	-	-	12-1 A
1- 2	-	-	17	14	23	-	-	1-2
2- 3	-	-	10	7	10	-	-	2-3
3- 4	-	-	10	3	8	-	-	3-4
4- 5	-	-	20	32	21	-	-	4-5
5- 6	-	-	69	68	76	-	-	5-6
6- 7	-	-	249	304	238	-	-	6-7
7- 8	-	-	527	622	481	-	-	7-8
8- 9	-	-	736	888	869	-	-	8-9
9-10	-	-	772	685	926	-	-	9-10
10-11	-	-	646	658	-	-	-	10-11
11-12	-	-	713	711	-	-	-	11-12
12- 1P	-	-	786	825	-	-	-	12-1 P
1- 2	-	-	891	864	-	-	-	1-2
2- 3	-	-	795	886	-	-	-	2-3
3- 4	-	-	918	921	-	-	-	3-4
4- 5	-	620	883	891	-	-	-	4-5
5- 6	-	628	806	738	-	-	-	5-6
6- 7	-	505	595	745	-	-	-	6-7
7- 8	-	496	447	663	-	-	-	7-8
8- 9	-	340	393	490	-	-	-	8-9
9-10	-	227	337	345	-	-	-	9-10
10-11	-	130	154	173	-	-	-	10-11
11-12	-	69	95	81	-	-	-	11-12
TOTAL	0	3015	10896	11657	2674	0	0	TOTAL

Intersections

Lincoln

Route 117 at Route 126

Trapelo Road at Lincoln/Weston/Bedford/Sandy Pond Road

Route 2 at Bedford Road

Lexington

Waltham Street at Route 2A

Waltham Street at Mass. Avenue

Mass. Avenue at Woburn Street

Bedford

Concord Road (Route 62) at Hartwell Road

Great Road (Routes 4/225/62) at North Road (Route 4) and Carlisle Road (Route 225)

Hartwell Road at South Road

Great Road at Hillside Spring Road

Concord

Route 2A at Cambridge Turnpike Cutoff

Route 2A at Old Bedford Road

Old Bedford Road at Virginia Road

Bedford Road (Route 62) at Old Bedford Road

Route 2 at Cambridge Turnpike Cutoff

Route 2 at Route 126

Route 2 at Sudbury Road

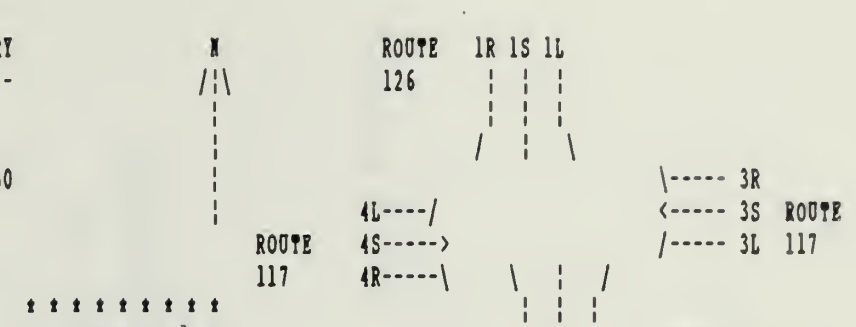
Route 2 at Main Street (Route 62)

MANUAL TURN MOVEMENT COUNT - 15 MINUTE SUMMARY

FOR: CENTRAL TRANSPORTATION PLANNING STAFF
BY: NORTHEAST TRAFFIC COUNTS
FILE: M-HAN-LN-1 AD-59 (17csi) L:52 #260

LOCATION: ROUTE 117 (SOUTH GREAT ROAD)
AT ROUTE 126 (CONCORD ROAD)
LINCOLN, MASSACHUSETTS

DATE: THURSDAY, OCTOBER 5, 1989



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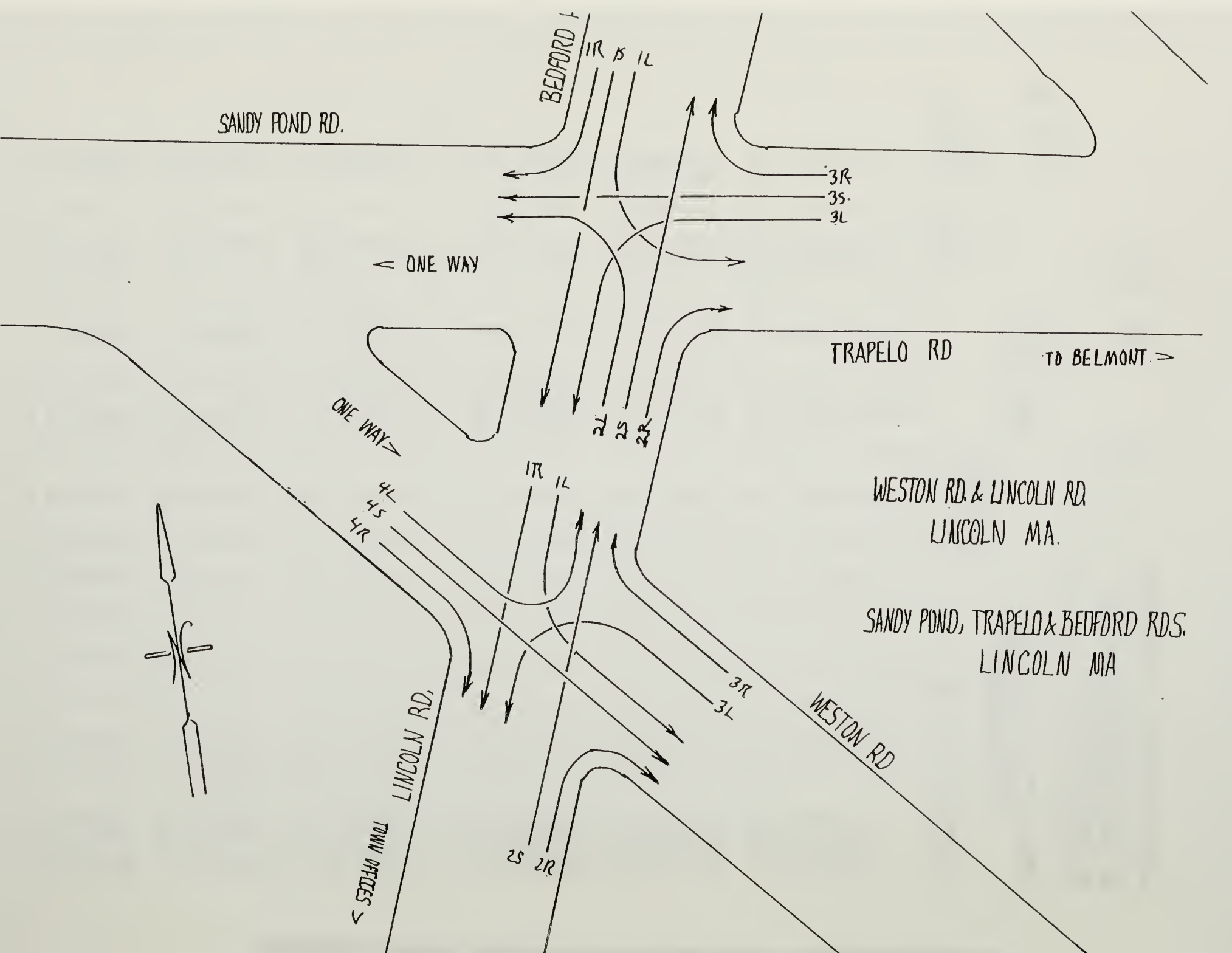
* ALL VEHICLES *
* * * * * * * * *

	/ 1R	| 1S	\ 1L	\/ TOT	\ 2L	| 2S	/ 2R	/\ TOT	\- 3R	< 3S	/- 3L	< TOT	-\ 4R	> 4S	-/ 4L	> TOT
7:00- 7:15	3	31	3	37	11	42	25	78	5	70	4	79	8	241	14	263
:15- 7:30	8	26	8	42	4	50	18	72	3	59	9	71	1	248	17	266
:30- 7:45	6	51	3	60	5	60	55	120	3	76	8	87	5	251	15	271
:45- 8:00	6	48	11	65	14	77	44	135	4	90	5	99	10	258	9	277
7- 8 AM	23	156	25	204	34	229	142	405	15	295	26	336	24	998	55	1077
8:00- 8:15	12	72	16	100	16	101	29	146	2	149	9	160	4	353	14	371
:15- 8:30	4	44	4	52	11	56	38	105	3	70	6	79	9	192	17	218
:30- 8:45	10	43	6	59	10	60	28	98	4	93	15	112	11	239	8	258
:45- 9:00	9	34	2	45	12	65	35	112	4	62	6	72	8	176	11	195
8- 9 AM	35	193	28	256	49	282	130	461	13	374	36	423	32	960	50	1042
9:00- 9:15	13	33	8	54	6	40	28	74	2	60	11	73	8	141	4	153
:15- 9:30	8	21	5	34	9	25	21	55	1	46	11	58	9	106	9	124
:30- 9:45	8	30	3	41	5	29	20	54	3	48	10	61	4	72	3	79
:45-10:00	9	25	2	36	8	36	18	62	2	35	14	51	5	76	3	84
9-10 AM	38	109	18	165	28	130	87	245	8	189	46	243	26	395	19	440
3:00- 3:15	15	32	10	57	9	42	23	74	9	91	14	114	8	59	5	72
:15- 3:30	2	30	5	37	15	15	14	44	2	88	26	116	8	75	4	87
:30- 3:45	12	33	4	49	12	31	10	53	3	99	23	125	12	65	1	78
:45- 4:00	15	42	1	58	15	44	17	76	3	163	19	185	13	89	2	104
3- 4 PM	44	137	20	201	51	132	64	247	17	441	82	540	41	288	12	341
4:00- 4:15	12	63	6	81	5	35	18	58	4	150	15	169	11	95	6	112
:15- 4:30	13	51	4	68	6	45	11	62	4	131	23	158	3	98	6	107
:30- 4:45	31	107	9	147	5	33	21	59	6	161	21	188	6	80	4	90
:45- 5:00	21	41	6	68	15	50	17	82	9	220	21	250	5	91	11	107
4- 5 PM	77	262	25	364	31	163	67	261	23	662	80	765	25	364	27	416
5:00- 5:15	12	53	5	70	9	47	19	75	6	182	28	216	12	107	5	124
:15- 5:30	27	56	9	92	8	45	14	67	4	214	31	249	13	117	9	139
:30- 5:45	26	60	5	91	10	53	15	78	5	230	45	280	11	126	10	147
:45- 6:00	24	57	11	92	13	43	19	75	4	215	32	251	16	115	6	137
5- 6 PM	89	226	30	345	40	188	67	295	19	841	136	996	52	465	30	547

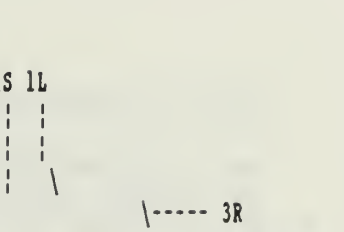

SANDY POND RD.
BEDFORD
1R 1S 1L
3R
3S
3L
ONE WAY
TRAPELO RD
TO BELMONT
ONE WAY
2L 2S 2R
1R 1L
4L
4S
4R
WESTON RD. & LINCOLN RD.
LINCOLN MA.
SANDY POND, TRAPELO & BEDFORD RDS.
LINCOLN MA
3R
3L
WESTON RD
LINCOLN RD.
TOWN OFFICES
2S 2R

MANUAL TURN MOVEMENT COUNT - 15 MINUTE SUMMARY

FOR: CENTRAL TRANSPORTATION PLANNING STAFF
BY: NORTHEAST TRAFFIC COUNTS
FILE: M-HAN-LN-2A AE-59 (17csi) L:54 #260

LOCATION: TRAPELO ROAD - SANDY POND ROAD
AT LINCOLD ROAD - BEDFORD ROAD
LINCOLN, MASSACHUSETTS

DATE: THURSDAY, OCTOBER 5, 1989



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* ALL VEHICLES *
* * * * * * * * *

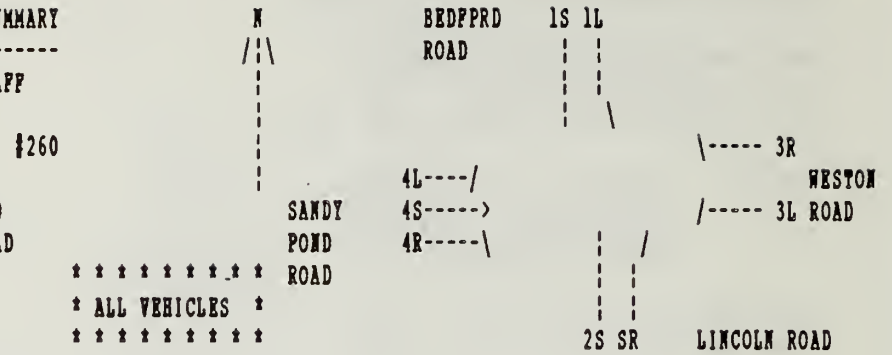
	/ 1R	¦ 1S	\ 1L	\/ TOT	\ 2L	¦ 2S	/ 2R	/\ TOT	\- 3R	< 3S	/- 3L	< TOT
7:00- 7:15	0	15	2	17	6	56	131	193	4	19	28	51
:15- 7:30	0	24	12	36	3	88	126	217	2	4	34	40
:30- 7:45	2	13	3	18	2	86	150	238	1	11	50	62
:45- 8:00	10	19	4	33	9	104	171	284	3	24	46	73
7- 8 AM	12	71	21	104	20	334	578	932	10	58	158	226
8:00- 8:15	3	23	1	27	3	89	197	289	8	30	48	86
:15- 8:30	6	27	3	36	10	83	227	320	9	18	35	62
:30- 8:45	2	26	9	37	10	55	151	216	6	14	53	73
:45- 9:00	2	33	6	41	6	78	149	233	11	13	56	80
8- 9 AM	13	109	19	141	29	305	724	1058	34	75	192	301
9:00- 9:15	5	26	6	37	3	47	96	146	5	15	42	62
:15- 9:30	10	19	3	32	10	21	58	89	1	18	23	42
:30- 9:45	5	18	1	24	4	36	53	93	5	15	24	44
:45-10:00	3	19	5	27	12	41	46	99	6	10	33	49
9-10 AM	23	82	15	120	29	145	253	427	17	58	122	197
3:00- 3:15	2	35	2	39	3	35	45	83	5	25	42	72
:15- 3:30	2	36	6	44	11	28	36	75	4	9	42	55
:30- 3:45	2	31	5	38	4	23	46	73	3	31	61	95
:45- 4:00	2	35	6	43	8	19	60	87	4	24	48	76
3- 4 PM	8	137	19	164	26	105	187	318	16	89	193	298
4:00- 4:15	1	49	3	53	6	31	54	91	13	18	51	82
:15- 4:30	4	30	6	40	3	33	59	95	14	42	58	114
:30- 4:45	5	46	4	55	11	31	74	116	6	45	84	135
:45- 5:00	3	46	3	52	5	25	61	91	15	27	76	118
4- 5 PM	13	171	16	200	25	120	248	393	48	132	269	449
5:00- 5:15	1	55	2	58	6	17	70	93	11	38	115	164
:15- 5:30	6	59	6	71	12	33	65	110	8	45	110	163
:30- 5:45	1	35	1	37	13	25	62	100	6	42	107	155
:45- 6:00	4	39	1	44	13	16	43	72	10	28	105	143
5- 6 PM	12	188	10	210	44	91	240	375	35	153	437	625

MANUAL TURN MOVEMENT COUNT - 15 MINUTE SUMMARY

FOR: CENTRAL TRANSPORTATION PLANNING STAFF
BY: NORTHEAST TRAFFIC COUNTS
FILE: M-HAM-LN2B AD-59 (17csi) L:55 #260

LOCATION: WESTON ROAD - SANDY POND ROAD
AT LINCOLN ROAD - BEDFORD ROAD
LINCOLN, MASSACHUSETTS

DATE: THURSDAY, OCTOBER 5, 1989



	1S	1L	TOT	2S	2R	TOT	3R	3L	TOT	4R	4S	4L	TOT
7:00- 7:15	51	0	51	170	0	170	6	0	6	0	0	39	39
:15- 7:30	43	2	45	169	2	171	4	2	6	3	0	31	34
:30- 7:45	60	0	60	196	0	196	4	8	12	4	0	38	42
:45- 8:00	64	2	66	248	2	250	4	5	10	13	1	53	67
7- 8 AM	219	4	223	783	4	787	18	15	34	20	1	161	182
8:00- 8:15	70	1	71	206	1	207	12	3	15	10	4	86	100
:15- 8:30	50	1	51	260	2	262	14	4	18	5	2	71	78
:30- 8:45	63	1	64	195	4	199	10	4	14	8	2	51	61
:45- 9:00	77	1	78	201	3	204	12	4	16	6	3	43	52
8- 9 AM	260	4	264	862	10	872	48	15	63	29	11	251	291
9:00- 9:15	58	5	63	130	0	130	9	3	12	6	1	29	36
:15- 9:30	44	0	44	77	3	80	5	2	8	3	0	14	17
:30- 9:45	45	0	45	70	2	72	4	1	5	4	2	17	23
:45-10:00	48	3	51	81	3	84	6	3	10	8	2	9	19
9-10 AM	195	8	203	358	8	366	24	9	34	21	5	69	95
3:00- 3:15	78	6	84	56	1	57	4	0	4	6	3	32	41
:15- 3:30	80	5	85	65	3	68	3	3	6	6	2	16	24
:30- 3:45	93	2	95	66	5	71	6	3	10	8	4	17	29
:45- 4:00	85	2	87	65	6	71	5	6	12	8	2	20	30
3- 4 PM	336	15	351	252	15	267	18	12	32	28	11	85	124
4:00- 4:15	96	5	101	70	3	73	4	5	10	5	4	23	32
:15- 4:30	101	2	103	87	5	92	8	2	10	11	1	17	29
:30- 4:45	119	8	127	76	2	78	3	4	8	8	6	33	47
:45- 5:00	120	2	122	70	11	81	5	0	5	10	5	24	39
4- 5 PM	436	17	453	303	21	324	20	11	32	34	16	97	146
5:00- 5:15	138	5	143	88	3	91	2	2	4	2	3	20	25
:15- 5:30	158	2	160	89	4	93	12	0	12	6	1	16	23
:30- 5:45	131	5	136	80	6	86	6	2	9	6	5	15	26
:45- 6:00	137	0	137	69	2	71	5	2	8	3	2	17	22
5- 6 PM	564	12	576	326	15	341	25	6	32	17	11	68	97

MANUAL TURN MOVEMENT COUNT - 15 MINUTE SUMMARY

FOR: CENTRAL TRANSPORTATION PLANNING STAFF
BY: NORTHEAST TRAFFIC COUNTS
FILE: M-HAN-LN-3 AD-59 (17csi) L:54 #260

LOCATION: ROUTE 2
AT BEDFORD ROAD
LINCOLN, MASSACHUSETTS

DATE: THURSDAY, OCTOBER 5, 1989

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* ALL VEHICLES *
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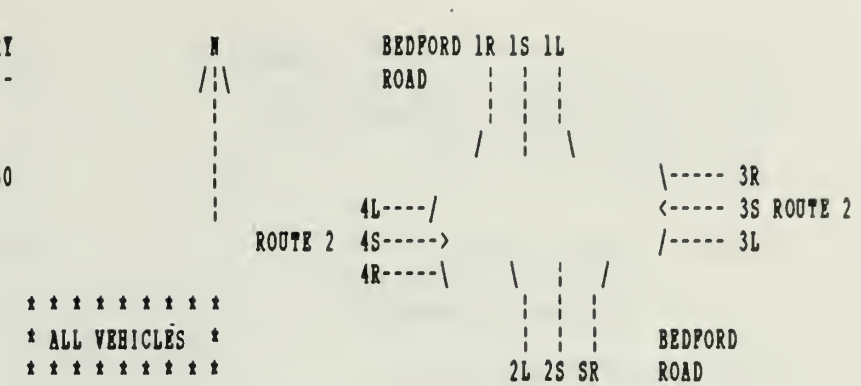


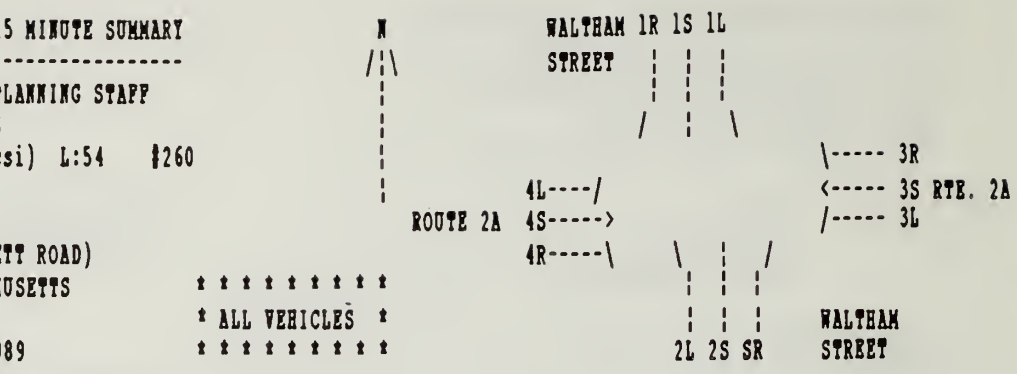
	/ 1R	¦ 1R	\ 1L	\/ TOT	\ 2L	¦ 2S	/ 2R	/\ TOT	\- 3R	< 3S	/- 3L	< TOT	-\ 4R	> 4S	-/ 4L	> TOT
7:00- 7:15	2	6	17	25	9	26	20	55	14	231	0	245	1	600	0	601
:15- 7:30	1	20	25	46	0	46	33	79	23	345	0	368	6	620	0	626
:30- 7:45	1	18	21	40	5	56	33	94	18	344	0	362	2	639	0	641
:45- 8:00	2	23	31	56	3	72	40	115	26	422	0	448	2	581	0	583
7- 8 AM	6	67	94	167	17	200	126	343	81	1342	0	1423	11	2440	0	2451
8:00- 8:15	3	31	33	67	6	61	48	115	32	402	2	436	3	585	0	588
:15- 8:30	2	26	27	55	3	56	40	99	40	378	1	419	5	627	0	632
:30- 8:45	2	32	28	62	4	57	25	86	49	389	1	439	6	566	0	572
:45- 9:00	1	33	32	66	2	58	21	81	36	345	2	383	3	469	0	472
8- 9 AM	8	122	120	250	15	232	134	381	157	1514	6	1677	17	2247	0	2264
9:00- 9:15	1	26	12	39	9	40	12	61	6	221	1	228	4	341	0	345
:15- 9:30	3	20	10	33	9	17	16	42	15	234	0	249	2	345	1	348
:30- 9:45	0	21	12	33	5	18	11	34	17	253	0	270	0	273	0	273
:45-10:00	2	15	8	25	3	17	12	32	13	227	1	241	8	252	1	261
9-10 AM	6	82	42	130	26	92	51	169	51	935	2	988	14	1211	2	1227
3:00- 3:15	0	40	13	53	4	21	14	39	15	284	2	301	0	261	0	261
:15- 3:30	2	32	12	46	8	24	6	38	13	338	2	353	5	274	0	279
:30- 3:45	2	40	10	52	9	19	14	42	15	326	0	341	4	304	1	309
:45- 4:00	1	33	13	47	3	13	13	29	11	433	1	445	5	387	0	392
3- 4 PM	5	145	48	198	24	77	47	148	54	1381	5	1440	14	1226	1	1241
4:00- 4:15	2	53	12	67	8	13	10	31	23	419	2	444	3	318	1	322
:15- 4:30	0	39	15	54	10	19	15	44	15	405	1	421	1	358	0	359
:30- 4:45	0	61	13	74	6	14	15	35	13	439	0	452	1	405	0	406
:45- 5:00	1	45	17	63	6	14	12	32	17	455	0	472	5	345	0	350
4- 5 PM	3	198	57	258	30	60	52	142	68	1718	3	1789	10	1426	1	1437
5:00- 5:15	1	50	11	62	9	20	15	44	24	534	0	558	3	380	0	383
:15- 5:30	5	64	17	86	5	23	16	44	40	540	0	580	3	477	0	480
:30- 5:45	2	43	13	58	10	12	20	42	31	495	1	527	2	421	0	423
:45- 6:00	1	49	8	58	8	25	5	38	29	491	0	520	3	432	0	435
5- 6 PM	9	206	49	264	32	80	56	168	124	2060	1	2185	11	1710	0	1721

MANUAL TURN MOVEMENT COUNT - 15 MINUTE SUMMARY

FOR: CENTRAL TRANSPORTATION PLANNING STAFF
BY: NORTHEAST TRAFFIC COUNTS
FILE: M-HAM-LEX-1 AD-59 (17csi) L:54 #260

LOCATION: WALTHAM STREET
AT ROUTE 2A (MARRETT ROAD)
LEXINGTON, MASSACHUSETTS

DATE: THURSDAY, OCTOBER 12, 1989



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* ALL VEHICLES *
* * * * * * * * *

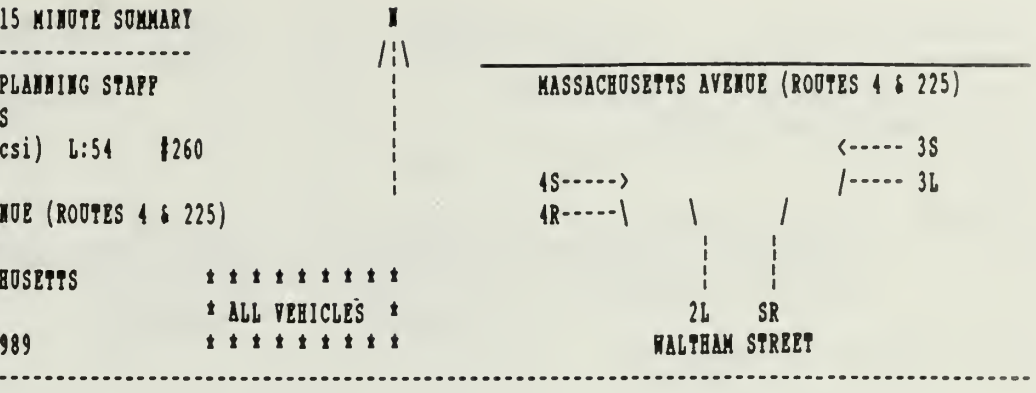
	/ 1R	| 1S	\ 1L	\/ TOT	\ 2L	| 2S	/ 2R	/\ TOT	\- 3R	< 3S	/- 3L	< TOT	-\ 4R	> 4S	-/ 4L	> TOT
7:00- 7:15	12	75	3	90	23	42	9	74	10	65	17	92	25	21	12	58
:15- 7:30	20	91	5	116	30	78	13	121	10	105	25	140	27	39	18	84
:30- 7:45	39	122	16	177	51	107	11	169	15	116	31	162	51	42	33	126
:45- 8:00	53	174	5	232	44	119	29	192	5	131	44	180	43	50	33	126
7- 8 AM	124	462	29	615	148	346	62	556	40	417	117	574	146	152	96	394
8:00- 8:15	27	162	10	199	40	126	20	186	8	105	42	155	58	53	27	138
:15- 8:30	66	143	3	212	38	138	13	189	10	130	33	173	34	42	27	103
:30- 8:45	41	159	6	206	38	103	6	147	10	114	51	175	43	40	27	110
:45- 9:00	31	123	6	160	35	136	10	181	15	90	31	136	45	54	36	135
8- 9 AM	165	587	25	777	151	503	49	703	43	439	157	639	180	189	117	486
9:00- 9:15	23	105	10	138	29	98	17	144	10	60	27	97	31	44	41	116
:15- 9:30	34	86	5	125	16	66	17	99	5	48	36	89	32	34	34	100
:30- 9:45	17	89	10	116	19	86	17	122	8	53	24	85	20	30	38	88
:45-10:00	24	74	6	104	15	89	11	115	16	40	23	79	20	43	34	97
9-10 AM	98	354	31	483	79	339	62	480	39	201	110	350	103	151	147	401
3:00- 3:15	29	84	8	121	27	125	27	179	15	46	18	79	29	55	34	118
:15- 3:30	29	116	10	155	19	114	25	158	15	58	17	90	33	77	35	145
:30- 3:45	38	137	10	185	15	101	29	145	14	49	18	81	43	77	38	158
:45- 4:00	38	128	14	180	23	113	25	161	13	50	25	88	35	74	29	138
3- 4 PM	134	465	42	641	84	453	106	643	57	203	78	338	140	283	136	559
4:00- 4:15	31	121	15	167	20	123	28	171	15	57	23	95	28	98	28	154
:15- 4:30	46	120	17	183	24	128	27	179	10	62	16	88	39	83	39	161
:30- 4:45	30	148	14	192	30	105	21	156	14	48	26	88	53	85	34	172
:45- 5:00	32	136	21	189	31	132	39	202	14	57	27	98	36	119	40	195
4- 5 PM	139	525	67	731	105	488	115	708	53	224	92	369	156	385	141	682
5:00- 5:15	21	162	15	198	23	159	41	223	15	66	20	101	35	110	47	192
:15- 5:30	32	178	18	228	14	159	31	204	19	62	27	108	38	108	40	186
:30- 5:45	21	159	12	192	13	188	26	227	14	45	19	78	46	95	57	198
:45- 6:00	27	138	11	176	24	162	21	207	14	60	21	95	40	105	49	194
5- 6 PM	101	637	56	794	74	668	119	861	62	233	87	382	159	418	193	770

MANUAL TURN MOVEMENT COUNT - 15 MINUTE SUMMARY

FOR: CENTRAL TRANSPORTATION PLANNING STAFF
BY: NORTHEAST TRAFFIC COUNTS
FILE: M-HAM-LEX-2 AD-59 (17csi) L:54 #260

LOCATION: MASSACHUSETTS AVENUE (ROUTES 4 & 225)
AT WALTHAM STREET
LEXINGTON, MASSACHUSETTS

DATE: THURSDAY, OCTOBER 12, 1989



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* ALL VEHICLES *
* * * * * * * * *

	\ 2L	/ 2R	/\ TOT	< 3S	/- 3L	< TOT	-\ 4R	> 4S	> TOT
7:00- 7:15	14	20	34	85	27	112	12	93	105
:15- 7:30	19	31	50	131	29	160	23	117	140
:30- 7:45	40	46	86	167	77	244	28	125	153
:45- 8:00	41	41	82	211	111	322	26	137	163
7- 8 AM	114	138	252	594	244	838	89	472	561
8:00- 8:15	45	43	88	206	62	268	32	154	186
:15- 8:30	33	44	77	199	56	255	28	135	163
:30- 8:45	41	39	80	228	62	290	32	144	176
:45- 9:00	10	10	20	80	18	98	20	57	77
8- 9 AM	129	136	265	713	198	911	112	490	602
9:00- 9:15	50	56	106	190	46	236	39	179	218
:15- 9:30	36	51	87	123	56	179	33	126	159
:30- 9:45	48	53	101	195	64	259	45	167	212
:45-10:00	32	30	62	152	44	196	38	124	162
9-10 AM	166	190	356	660	210	870	155	596	751
3:00- 3:15	50	62	112	168	65	233	36	152	188
:15- 3:30	43	43	86	166	36	202	27	183	210
:30- 3:45	53	54	107	177	53	230	40	237	277
:45- 4:00	44	61	105	135	48	183	34	197	231
3- 4 PM	190	220	410	646	202	848	137	769	906
4:00- 4:15	39	53	92	154	30	184	35	182	217
:15- 4:30	40	59	99	168	36	204	47	206	253
:30- 4:45	48	60	108	147	46	193	30	186	216
:45- 5:00	50	66	116	167	49	216	26	211	237
4- 5 PM	177	238	415	636	161	797	138	785	923
5:00- 5:15	41	69	110	152	38	190	25	254	279
:15- 5:30	54	78	132	155	49	204	35	246	281
:30- 5:45	54	62	116	164	48	212	33	220	253
:45- 6:00	46	70	116	161	49	210	32	208	240
5- 6 PM	195	279	474	632	184	816	125	928	1053

MANUAL TURN MOVEMENT COUNT - 15 MINUTE SUMMARY

FOR: CENTRAL TRANSPORTATION PLANNING STAFF
BY: NORTHEAST TRAFFIC COUNTS
FILE: M-HAN-LEX-3 AP-59(121) (17csi) L:56 #260

LOCATION: MASSACHUSETTS AVENUE
AT WOBURN STREET - PLETCHER AVENUE - WINTHROP ROAD
LEXINGTON, MASSACHUSETTS
* * * * * * * * * *
* ALL VEHICLES *
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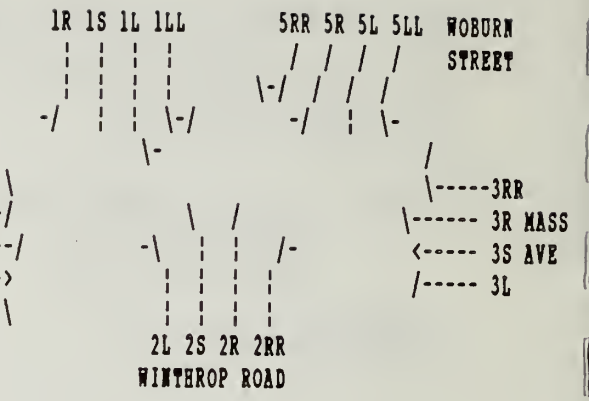
DATE: THURSDAY, OCTOBER 12, 1989



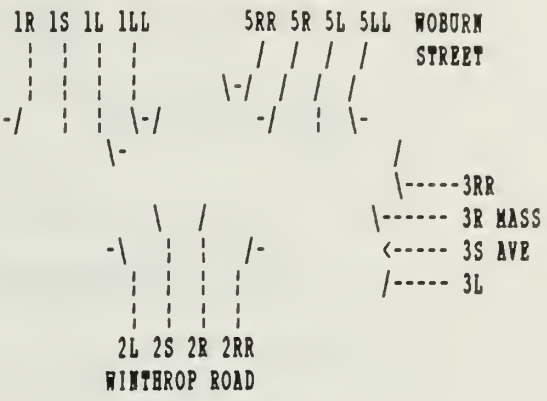
	/ 1R	¦ 1S	\- 1L	\-/ 1LL	\/ TOT	\ 2L	¦ 2S	/ 2R	/- 2RR	/\ TOT	\ 3RR	\ 3R	< 3S	/- 3L	< TOT	-\ 4R	> 4S	-/ 4L	-/ 4LL	> TOT
7:00- 7:15	0	2	5	0	7	2	1	2	0	5	9	1	74	0	84	0	77	19	2	98
:15- 7:30	0	0	4	0	4	1	0	1	2	4	6	0	87	0	93	4	90	24	2	120
:30- 7:45	3	1	4	0	8	2	1	2	1	6	6	3	131	3	143	3	96	23	2	124
:45- 8:00	2	0	5	1	8	3	1	2	1	7	13	4	128	2	147	8	111	16	1	136
7- 8 AM	5	3	18	1	27	8	3	7	4	22	34	8	420	5	467	15	374	82	7	478
8:00- 8:15	6	1	9	3	19	4	2	3	4	13	14	3	147	1	165	3	140	36	3	182
:15- 8:30	5	1	5	2	13	1	1	4	1	7	8	6	80	3	97	5	116	34	2	157
:30- 8:45	3	0	5	1	9	4	1	1	2	8	11	2	155	3	171	5	106	46	2	159
:45- 9:00	2	0	6	0	8	1	1	5	0	7	5	5	163	4	177	6	124	25	2	157
8- 9 AM	16	2	25	6	49	10	5	13	7	35	38	16	545	11	610	19	486	141	9	655
9:00- 9:15	4	0	4	2	10	0	0	3	1	4	12	5	110	6	133	5	144	29	5	183
:15- 9:30	1	1	8	2	12	1	0	3	5	9	4	0	109	2	115	5	102	35	0	142
:30- 9:45	2	1	6	0	9	3	0	2	3	8	10	0	129	0	139	11	86	27	0	124
:45-10:00	1	3	9	0	13	2	0	9	4	15	2	3	117	0	122	3	93	19	2	117
9-10 AM	8	5	27	4	44	6	0	17	13	36	28	8	465	8	509	24	425	110	7	566
3:00- 3:15	5	0	5	0	10	8	0	8	5	21	10	3	129	1	143	4	121	45	3	173
:15- 3:30	1	0	8	1	10	1	0	6	5	12	13	3	137	0	153	3	136	66	2	207
:30- 3:45	3	0	1	8	12	6	2	6	10	24	21	6	128	2	157	9	155	70	3	237
:45- 4:00	2	0	8	10	20	4	0	10	11	25	24	3	125	3	155	6	160	66	4	236
3- 4 PM	11	0	22	19	52	19	2	30	31	82	68	15	519	6	608	22	572	247	12	853
4:00- 4:15	3	1	8	3	15	2	0	8	6	16	15	8	107	4	134	6	151	73	4	234
:15- 4:30	1	0	10	3	14	6	1	19	10	36	14	2	138	4	158	10	126	94	3	233
:30- 4:45	2	0	14	15	31	2	3	10	11	26	17	2	121	2	142	4	134	78	4	220
:45- 5:00	2	1	6	9	18	5	3	12	12	32	23	4	153	6	186	8	167	95	2	272
4- 5 PM	8	2	38	30	78	15	7	49	39	110	69	16	519	16	620	28	578	340	13	959
5:00- 5:15	3	0	5	3	11	1	2	19	13	35	18	0	136	3	157	6	150	109	5	270
:15- 5:30	6	2	9	4	21	3	1	13	5	22	21	6	162	6	195	8	152	117	5	282
:30- 5:45	2	0	4	5	11	3	2	12	9	26	11	4	130	2	147	8	162	75	4	249
:45- 6:00	4	0	3	5	12	6	1	11	9	27	14	2	130	2	148	5	116	94	1	216
5- 6 PM	15	2	21	17	55	13	6	55	36	110	64	12	558	13	647	27	580	395	15	1017

MANUAL TURN MOVEMENT COUNT - 15 MINUTE SUMMARY

FOR: CENTRAL TRANSPORTATION PLANNING STAFF
BY: NORTHEAST TRAFFIC COUNTS
FILE: M-HAM-LEX-3 AP-59(121) (17csi) L:56 #260

LOCATION: MASSACHUSETTS AVENUE
AT WOBURN STREET - FLETCHER AVENUE - WINTHROP ROAD
LEXINGTON, MASSACHUSETTS
* * * * * * * * * *
* ALL VEHICLES *
* * * * * * * * * *

DATE: THURSDAY, OCTOBER 12, 1989



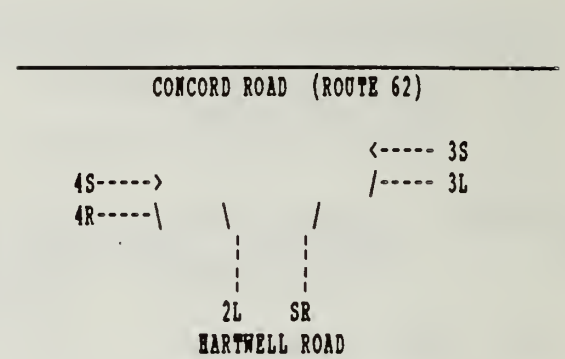
	\-/ 5RR	-/ 5R	¦ 5L	\- 5LL	// TOT
7:00- 7:15	4	25	1	6	36
:15- 7:30	10	56	3	14	83
:30- 7:45	6	86	8	16	116
:45- 8:00	9	108	13	19	149
7- 8 AM	29	275	25	55	384
8:00- 8:15	8	94	13	28	143
:15- 8:30	14	102	11	15	142
:30- 8:45	2	88	6	19	115
:45- 9:00	4	89	11	13	117
8- 9 AM	28	373	41	75	517
9:00- 9:15	0	62	4	6	72
:15- 9:30	0	56	3	11	70
:30- 9:45	4	53	6	11	74
:45- 10:00	4	61	3	11	79
9-10 AM	8	232	16	39	295
3:00- 3:15	2	57	2	6	67
:15- 3:30	3	62	5	13	83
:30- 3:45	3	48	1	10	62
:45- 4:00	1	39	3	17	60
3- 4 PM	9	206	11	46	272
4:00- 4:15	4	42	1	13	60
:15- 4:30	2	34	4	16	56
:30- 4:45	3	49	6	14	72
:45- 5:00	2	40	1	14	57
4- 5 PM	11	165	12	57	245
5:00- 5:15	1	64	6	9	80
:15- 5:30	1	56	5	9	71
:30- 5:45	5	62	5	15	87
:45- 6:00	0	47	5	15	67
5- 6 PM	7	229	21	48	305

MANUAL TURN MOVEMENT COUNT - 15 MINUTE SUMMARY

FOR: CENTRAL TRANSPORTATION PLANNING STAFF
BY: NORTHEAST TRAFFIC COUNTS
FILE: M-HAN-BED-1 AD-59 (17csi) L:56 #260

LOCATION: CONCORD ROAD (ROUTE 62)
AT HARTWELL ROAD
BEDFORD, MASSACHUSETTS

DATE: WEDNESDAY, OCTOBER 4, 1989



* ALL VEHICLES *

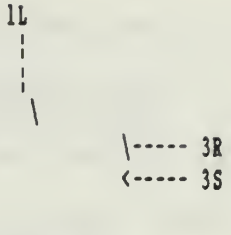
	\ 2L	/ 2R	/\ TOT	< 3S	/- 3L	< TOT	-\ 4R	> 4S	> TOT
7:00- 7:15	6	23	29	57	43	100	31	125	156
:15- 7:30	4	4	8	76	61	137	75	161	236
:30- 7:45	10	3	13	76	55	131	64	195	259
:45- 8:00	6	1	7	77	55	132	105	199	304
7- 8 AM	26	31	57	286	214	500	275	680	955
8:00- 8:15	11	4	15	63	41	104	70	129	199
:15- 8:30	14	8	22	105	25	130	80	116	196
:30- 8:45	28	12	40	74	18	92	35	110	145
:45- 9:00	6	4	10	86	15	101	40	163	203
8- 9 AM	59	28	87	328	99	427	225	518	743
9:00- 9:15	10	6	16	75	11	86	24	107	131
:15- 9:30	5	10	15	51	14	65	17	111	128
:30- 9:45	13	9	22	60	6	66	9	89	98
:45-10:00	6	11	17	58	11	69	4	63	67
9-10 AM	34	36	70	244	42	286	54	370	424
3:00- 3:15	17	35	52	85	12	97	15	95	110
:15- 3:30	29	23	52	92	9	101	11	92	103
:30- 3:45	38	59	97	109	10	119	6	79	85
:45- 4:00	20	30	50	103	8	111	6	111	117
3- 4 PM	104	147	251	389	39	428	38	377	415
4:00- 4:15	34	43	77	128	3	131	8	83	91
:15- 4:30	29	46	75	110	6	116	5	77	82
:30- 4:45	54	44	98	128	9	137	16	102	118
:45- 5:00	65	59	124	135	6	141	12	100	112
4- 5 PM	182	192	374	501	24	525	41	362	403
5:00- 5:15	69	34	103	179	8	187	14	104	118
:15- 5:30	43	30	73	134	8	142	9	88	97
:30- 5:45	50	29	79	132	9	141	11	85	96
:45- 6:00	20	14	34	125	2	127	8	109	117
5- 6 PM	182	107	289	570	27	597	42	386	428

MANUAL TURN MOVEMENT COUNT - 15 MINUTE SUMMARY

FOR: CENTRAL TRANSPORTATION PLANNING STAFF
BY: NORTHEAST TRAFFIC COUNTS
FILE: M-HAN-BED-2 AD-59 (17csi) L:56 #260

LOCATION: GREAT ROAD (ROUTES 4 & 225) - CONCORD ROAD (ROUTE 62)
AT NORTH ROAD (ROUTES 4 & 225)
BEDFORD, MASSACHUSETTS

DATE: WEDNESDAY, OCTOBER 4, 1989



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* ALL VEHICLES *
* * * * * * * * *

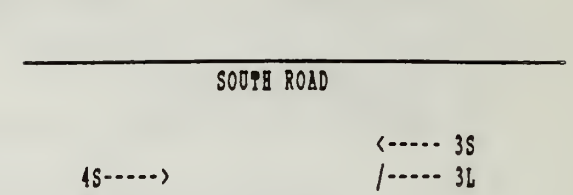
	/ 1R	\ 1L	\/ TOT	\- 3R	< 3S	< TOT	> 4S	-/ 4L	> TOT
7:00- 7:15	101	251	352	47	34	81	99	64	163
:15- 7:30	90	197	287	44	50	94	115	49	164
:30- 7:45	104	205	309	60	61	121	155	66	221
:45- 8:00	83	159	242	84	48	132	164	77	241
7- 8 AM	378	812	1190	235	193	428	533	256	789
8:00- 8:15	61	177	238	63	46	109	104	49	153
:15- 8:30	50	167	217	71	61	132	83	45	128
:30- 8:45	62	143	205	66	57	123	113	59	172
:45- 9:00	39	121	160	51	45	96	95	44	139
8- 9 AM	212	608	820	251	209	460	395	197	592
9:00- 9:15	32	105	137	65	64	129	73	38	111
:15- 9:30	20	101	121	78	35	113	100	32	132
:30- 9:45	33	80	113	63	45	108	84	43	127
:45-10:00	26	78	104	45	53	98	71	20	91
9-10 AM	111	364	475	251	197	448	328	133	461
3:00- 3:15	34	71	105	62	66	128	60	60	120
:15- 3:30	36	75	111	128	78	206	51	47	98
:30- 3:45	28	109	137	205	103	308	71	122	193
:45- 4:00	35	87	122	201	85	286	70	60	130
3- 4 PM	133	342	475	596	332	928	252	289	541
4:00- 4:15	63	91	154	325	121	446	116	77	193
:15- 4:30	25	59	84	199	71	270	53	84	137
:30- 4:45	50	76	126	250	96	346	55	91	146
:45- 5:00	46	87	133	271	132	403	80	118	198
4- 5 PM	184	313	497	1045	420	1465	304	370	674
5:00- 5:15	63	94	157	246	99	345	58	113	171
:15- 5:30	59	98	157	261	119	380	74	86	160
:30- 5:45	42	79	121	259	108	367	62	73	135
:45- 6:00	34	89	123	196	92	288	78	61	139
5- 6 PM	198	360	558	962	418	1380	272	333	605

MANUAL TURN MOVEMENT COUNT - 15 MINUTE SUMMARY

FOR: CENTRAL TRANSPORTATION PLANNING STAFF
BY: NORTHEAST TRAFFIC COUNTS
FILE: M-HAN-BED-3 AD-59 (17csi) L:56 #260

LOCATION: SOUTH ROAD
AT HARTWELL ROAD
BEDFORD, MASSACHUSETTS

DATE: WEDNESDAY, OCTOBER 4, 1989



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* ALL VEHICLES *
* * * * * * * * *

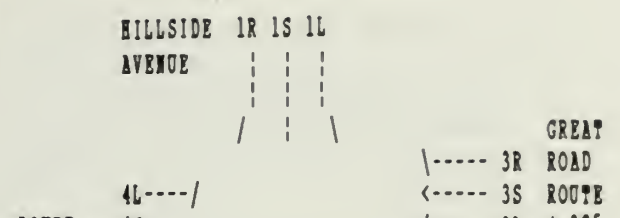
	\ 2L	/ 2R	/\ TOT	< 3S	/- 3L	< TOT	-\ 4R	> 4S	> TOT
7:00- 7:15	19	28	47	26	46	72	34	131	165
:15- 7:30	32	49	81	49	55	104	40	135	175
:30- 7:45	39	53	92	40	63	103	48	123	171
:45- 8:00	34	39	73	46	47	93	53	150	203
7- 8 AM	124	169	293	161	211	372	175	539	714
8:00- 8:15	26	46	72	43	46	89	54	166	220
:15- 8:30	23	45	68	42	30	72	36	143	179
:30- 8:45	27	33	60	45	25	70	14	102	116
:45- 9:00	26	29	55	33	14	47	16	85	101
8- 9 AM	102	153	255	163	115	278	120	496	616
9:00- 9:15	18	35	53	44	5	49	16	59	75
:15- 9:30	25	15	40	38	4	42	19	40	59
:30- 9:45	14	15	29	23	9	32	26	21	47
:45-10:00	13	8	21	26	15	41	19	24	43
9-10 AM	70	73	143	131	33	164	80	144	224
3:00- 3:15	31	33	64	59	19	78	21	31	52
:15- 3:30	31	34	65	87	10	97	27	36	63
:30- 3:45	72	68	140	125	24	149	17	43	60
:45- 4:00	30	27	57	107	19	126	19	38	57
3- 4 PM	164	162	326	378	72	450	84	148	232
4:00- 4:15	38	24	62	156	23	179	30	43	73
:15- 4:30	40	33	73	189	28	217	25	36	61
:30- 4:45	44	42	86	190	45	235	19	43	62
:45- 5:00	56	38	94	201	46	247	36	42	78
4- 5 PM	178	137	315	736	142	878	110	164	274
5:00- 5:15	43	39	82	212	43	255	32	47	79
:15- 5:30	28	19	47	168	44	212	33	47	80
:30- 5:45	27	26	53	154	39	193	27	44	71
:45- 6:00	20	20	40	117	23	140	23	44	67
5- 6 PM	118	104	222	651	149	800	115	182	297

MANUAL TURN MOVEMENT COUNT - 15 MINUTE SUMMARY

FOR: CENTRAL TRANSPORTATION PLANNING STAFF
BY: NORTHEAST TRAFFIC COUNTS
FILE: M-HAN-BED-4 AD-59 (17csi) L:54 #260

LOCATION: GREAT ROAD (ROUTE 4-225)
AT HILLSIDE AVENUE-BACON STREET
BEDFORD, MASSACHUSETTS

DATE: WEDNESDAY, OCTOBER 4, 1989



* * * * * * * * * *
* ALL VEHICLES *
* * * * * * * * * *

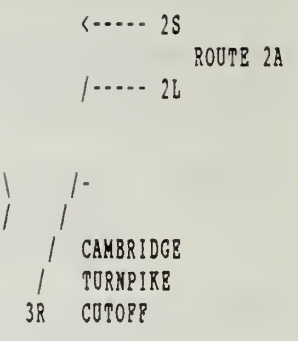
	/ 1R	| 1S	\ 1L	\/ TOT	\ 2L	| 2S	/ 2R	/\ TOT	\- 3R	< 3S	/- 3L	< TOT	-\ 4R	> 4S	-/ 4L	> TOT
7:00- 7:15	0	5	26	31	1	0	3	4	31	62	6	99	1	244	2	247
:15- 7:30	1	10	38	49	0	1	2	3	65	98	2	165	1	268	1	270
:30- 7:45	3	9	56	68	0	1	3	4	84	101	2	187	0	263	3	266
:45- 8:00	2	14	53	69	0	1	4	5	91	74	10	175	1	271	2	274
7- 8 AM	6	38	173	217	1	3	12	16	271	335	20	626	3	1046	8	1057
8:00- 8:15	1	11	63	75	0	0	2	2	42	94	2	138	3	273	4	280
:15- 8:30	2	1	44	47	1	1	9	11	34	101	9	144	1	236	4	241
:30- 8:45	1	3	34	38	0	1	5	6	50	109	2	161	0	197	3	200
:45- 9:00	3	0	36	39	1	1	8	10	62	96	9	167	2	226	2	230
8- 9 AM	7	15	177	199	2	3	24	29	188	400	22	610	6	932	13	951
9:00- 9:15	8	1	27	36	1	2	14	17	36	114	4	154	1	195	1	197
:15- 9:30	2	2	15	19	0	0	8	8	38	95	8	141	1	207	2	210
:30- 9:45	3	1	25	29	0	0	3	3	57	116	10	183	0	174	2	176
:45-10:00	1	1	24	26	1	0	6	7	43	114	4	161	0	147	1	148
9-10 AM	14	5	91	110	2	2	31	35	174	439	26	639	2	723	6	731
3:00- 3:15	2	3	35	40	1	1	8	10	44	143	11	198	0	173	6	179
:15- 3:30	1	3	31	35	0	0	6	6	57	154	5	216	5	144	1	150
:30- 3:45	2	0	24	26	0	8	9	17	57	175	11	243	0	179	2	181
:45- 4:00	1	2	20	23	2	3	13	18	57	214	6	277	3	143	3	149
3- 4 PM	6	8	110	124	3	12	36	51	215	686	33	934	8	639	12	659
4:00- 4:15	1	2	33	36	2	8	14	24	50	198	13	261	4	132	10	146
:15- 4:30	1	3	26	30	2	9	10	21	47	150	8	205	4	140	3	147
:30- 4:45	1	0	30	31	2	10	23	35	76	206	15	297	4	133	3	140
:45- 5:00	4	1	20	25	1	12	16	29	63	211	13	287	3	154	5	162
4- 5 PM	7	6	109	122	7	39	63	109	236	765	49	1050	15	559	21	595
5:00- 5:15	1	0	13	14	3	17	21	41	73	209	9	291	0	162	9	171
:15- 5:30	1	0	12	13	6	6	20	32	70	181	8	259	0	173	11	184
:30- 5:45	0	1	9	10	0	3	18	21	53	221	12	286	1	138	4	143
:45- 6:00	2	0	23	25	0	2	12	14	81	185	16	282	2	156	0	158
5- 6 PM	4	1	57	62	9	28	71	108	277	796	45	1118	3	629	24	656

MANUAL TURN MOVEMENT COUNT - 15 MINUTE SUMMARY

FOR: CENTRAL TRANSPORTATION PLANNING STAFF
BY: NORTHEAST TRAFFIC COUNTS
FILE: M-HN-CON-1X AD-59 (17csi) L:65 #260

LOCATION: ROUTE 2A
AT CAMBRIDGE TURNPIKE CUTOFF
CONCORD, MASSACHUSETTS

DATE: WEDNESDAY, APRIL 4, 1990



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* ALL VEHICLES *
* * * * * * * * *

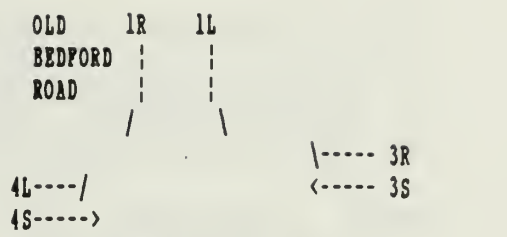
	> 1S	-\ 1R	> TOT	< 2S	/- 2L	< TOT	\ 3L	/- 3R	/ TOT
7:00- 7:15	0	0	0	0	0	0	0	0	0
:15- 7:30	0	0	0	0	0	0	0	0	0
:30- 7:45	0	0	0	0	0	0	0	0	0
:45- 8:00	0	0	0	0	0	0	0	0	0
7- 8 AM	0	0	0	0	0	0	0	0	0
8:00- 8:15	141	9	150	53	102	155	2	145	147
:15- 8:30	159	2	161	98	117	215	2	144	146
:30- 8:45	181	0	181	87	72	159	3	98	101
:45- 9:00	171	1	172	48	62	110	4	105	109
8- 9 AM	652	12	664	286	353	639	11	492	503
9:00- 9:15	0	0	0	0	0	0	0	0	0
:15- 9:30	0	0	0	0	0	0	0	0	0
:30- 9:45	0	0	0	0	0	0	0	0	0
:45-10:00	0	0	0	0	0	0	0	0	0
9-10 AM	0	0	0	0	0	0	0	0	0
3:00- 3:15	0	0	0	0	0	0	0	0	0
:15- 3:30	0	0	0	0	0	0	0	0	0
:30- 3:45	0	0	0	0	0	0	0	0	0
:45- 4:00	0	0	0	0	0	0	0	0	0
3- 4 PM	0	0	0	0	0	0	0	0	0
4:00- 4:15	64	2	66	197	135	332	2	77	79
:15- 4:30	61	4	65	223	150	373	1	77	78
:30- 4:45	94	10	104	204	120	324	9	102	111
:45- 5:00	124	1	125	236	111	347	1	108	109
4- 5 PM	343	17	360	860	516	1376	13	364	377
5:00- 5:15	0	0	0	0	0	0	0	0	0
:15- 5:30	0	0	0	0	0	0	0	0	0
:30- 5:45	0	0	0	0	0	0	0	0	0
:45- 6:00	0	0	0	0	0	0	0	0	0
5- 6 PM	0	0	0	0	0	0	0	0	0

MANUAL TURN MOVEMENT COUNT - 15 MINUTE SUMMARY

FOR: CENTRAL TRANSPORTATION PLANNING STAFF
BY: NORTHEAST TRAFFIC COUNTS
FILE: M-HAN-CON-2 AD-59 (17csi) L:56 #260

LOCATION: ROUTE 2A (LEXINGTON STREET)
AT OLD BEDFORD ROAD
CONCORD, MASSACHUSETTS

DATE: THURSDAY, SEPTEMBER 28, 1989



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* ALL VEHICLES *
* * * * * * * * *

ROUTE 2A (LEXINGTON STREET)

	/ 1R	\ 1L	\/ TOT	\- 3R	< 3S	< TOT	> 4S	-/ 4L	> TOT
7:00- 7:15	14	16	30	9	25	34	95	55	150
:15- 7:30	40	64	104	17	58	75	263	133	396
:30- 7:45	84	98	182	26	100	126	398	286	684
:45- 8:00	113	126	239	50	153	203	578	494	1072
7- 8 AM	251	304	555	102	336	438	1334	968	2302
8:00- 8:15	150	153	303	68	219	287	709	646	1355
:15- 8:30	184	192	376	89	279	368	825	830	1655
:30- 8:45	214	160	374	103	396	499	936	970	1906
:45- 9:00	260	230	490	114	418	532	1000	1054	2054
8- 9 AM	808	735	1543	374	1312	1686	3470	3500	6970
9:00- 9:15	39	19	58	10	26	36	63	55	118
:15- 9:30	18	27	45	8	47	55	56	35	91
:30- 9:45	19	6	25	4	41	45	50	38	88
:45-10:00	17	8	25	4	27	31	77	35	112
9-10 AM	93	60	153	26	141	167	246	163	409
3:00- 3:15	41	16	57	12	75	87	49	25	74
:15- 3:30	30	11	41	11	83	94	72	46	118
:30- 3:45	49	9	58	12	117	129	60	36	96
:45- 4:00	53	9	62	8	91	99	50	30	80
3- 4 PM	173	45	218	43	366	409	231	137	368
4:00- 4:15	64	6	70	9	121	130	68	42	110
:15- 4:30	84	14	98	20	114	134	57	43	100
:30- 4:45	103	18	121	17	124	141	41	36	77
:45- 5:00	98	9	107	30	140	170	59	40	99
4- 5 PM	349	47	396	76	499	575	225	161	386
5:00- 5:15	108	17	125	20	144	164	36	56	92
:15- 5:30	104	23	127	24	179	203	59	53	112
:30- 5:45	87	18	105	30	152	182	45	59	104
:45- 6:00	70	19	89	38	209	247	36	32	68
5- 6 PM	369	77	446	112	684	796	176	200	376

MANUAL TURN MOVEMENT COUNT - 15 MINUTE SUMMARY

FOR: CENTRAL TRANSPORTATION PLANNING STAFF
BY: NORTHEAST TRAFFIC COUNTS
FILE: M-HAN-CON-3 AD-59 (17csi) L:56 #260

LOCATION: OLD BEDFORD ROAD
AT VIRGINIA ROAD
CONCORD, MASSACHUSETTS

DATE: THURSDAY, SEPTEMBER 28, 1989

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* ALL VEHICLES *
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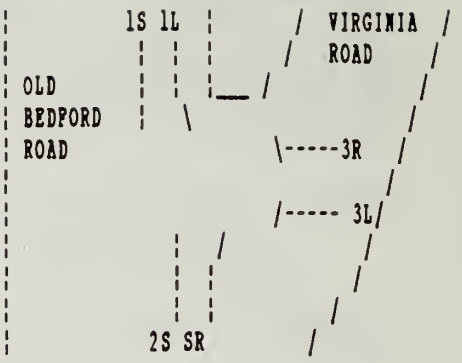


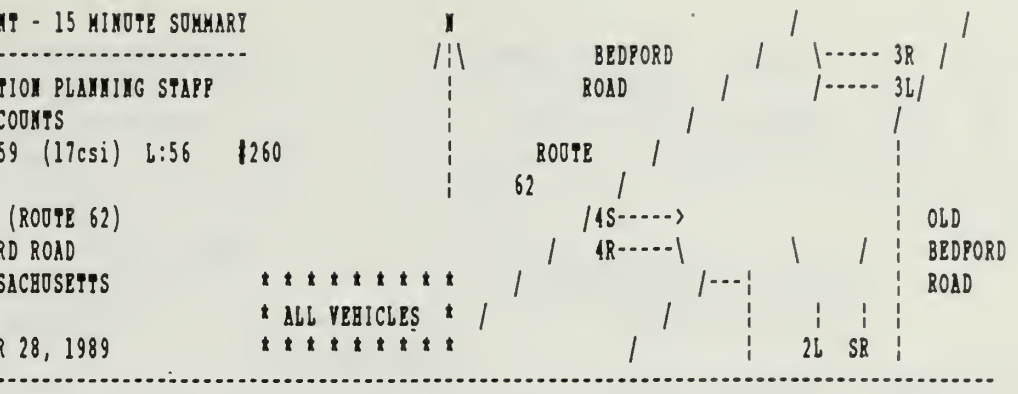
	1S	1L	\/ TOT	2S	2R	/\ TOT	3R	3L	< TOT
7:00- 7:15	29	12	41	42	23	65	2	4	6
:15- 7:30	50	12	62	41	33	74	5	9	14
:30- 7:45	54	14	68	80	75	155	6	15	21
:45- 8:00	35	16	51	78	109	187	13	9	22
7- 8 AM	168	54	222	241	240	481	26	37	63
8:00- 8:15	41	18	59	56	100	156	3	6	9
:15- 8:30	54	21	75	60	115	175	4	9	13
:30- 8:45	42	9	51	59	78	137	5	10	15
:45- 9:00	55	15	70	28	46	74	4	10	14
8- 9 AM	192	63	255	203	339	542	16	35	51
9:00- 9:15	33	9	42	32	32	64	0	11	11
:15- 9:30	24	2	26	18	12	30	4	12	16
:30- 9:45	12	4	16	16	11	27	2	13	15
:45-10:00	11	1	12	27	4	31	4	3	7
9-10 AM	80	16	96	93	59	152	10	39	49
3:00- 3:15	33	2	35	31	10	41	8	19	27
:15- 3:30	26	2	28	42	8	50	15	11	26
:30- 3:45	28	0	28	32	8	40	13	21	34
:45- 4:00	33	3	36	39	6	45	16	26	42
3- 4 PM	120	7	127	144	32	176	52	77	129
4:00- 4:15	36	3	39	33	10	43	8	31	39
:15- 4:30	59	3	62	42	9	51	21	28	49
:30- 4:45	50	4	54	47	11	58	17	47	64
:45- 5:00	49	3	52	40	18	58	10	40	50
4- 5 PM	194	13	207	162	48	210	56	146	202
5:00- 5:15	54	3	57	49	13	62	26	60	86
:15- 5:30	69	5	74	55	9	64	21	35	56
:30- 5:45	62	8	70	66	6	72	10	35	45
:45- 6:00	36	1	37	69	2	71	13	31	44
5- 6 PM	221	17	238	239	30	269	70	161	231

MANUAL TURN MOVEMENT COUNT - 15 MINUTE SUMMARY

FOR: CENTRAL TRANSPORTATION PLANNING STAFF
BY: NORTHEAST TRAFFIC COUNTS
FILE: M-HAN-CON - 4 AD-59 (17csi) L:56 #260

LOCATION: BEDFORD ROAD (ROUTE 62)
AT OLD BEDFORD ROAD
CONCORD, MASSACHUSETTS

DATE: THURSDAY, SEPTEMBER 28, 1989



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* ALL VEHICLES *
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	\ 2L	/ 2R	/\ TOT	\- 3R	/- 3L	< TOT	-\ 4R	> 4S	> TOT
7:00- 7:15	1	40	41	46	40	86	14	133	147
:15- 7:30	2	47	49	38	42	80	15	169	184
:30- 7:45	3	69	72	66	42	108	14	144	158
:45- 8:00	3	100	103	72	41	113	17	134	151
7- 8 AM	9	256	265	222	165	387	60	580	640
8:00- 8:15	4	57	61	69	34	103	18	134	152
:15- 8:30	5	55	60	65	53	118	18	136	154
:30- 8:45	1	54	55	57	35	92	10	99	109
:45- 9:00	5	38	43	64	39	103	12	92	104
8- 9 AM	15	204	219	255	161	416	58	461	519
9:00- 9:15	6	30	36	54	34	88	8	76	84
:15- 9:30	1	17	18	39	27	66	5	46	51
:30- 9:45	8	16	24	48	18	66	5	55	60
:45-10:00	4	13	17	50	16	66	4	49	53
9-10 AM	19	76	95	191	95	286	22	226	248
3:00- 3:15	10	31	41	102	21	123	5	43	48
:15- 3:30	6	44	50	105	24	129	6	45	51
:30- 3:45	14	24	38	103	27	130	4	51	55
:45- 4:00	11	46	57	79	45	124	5	48	53
3- 4 PM	41	145	186	389	117	506	20	187	207
4:00- 4:15	8	33	41	105	45	150	4	56	60
:15- 4:30	12	49	61	120	49	169	3	50	53
:30- 4:45	14	39	53	121	41	162	9	68	77
:45- 5:00	13	44	57	120	61	181	4	45	49
4- 5 PM	47	165	212	466	196	662	20	219	239
5:00- 5:15	25	47	72	150	57	207	8	48	56
:15- 5:30	21	78	99	148	57	205	10	73	83
:30- 5:45	21	62	83	145	50	195	6	86	92
:45- 6:00	9	59	68	144	39	183	10	80	90
5- 6 PM	76	246	322	587	203	790	34	287	321

MANUAL TURN MOVEMENT COUNT - 15 MINUTE SUMMARY

FOR: CENTRAL TRANSPORTATION PLANNING STAFF
BY: NORTHEAST TRAFFIC COUNTS
FILE: M-HAN-CON-5 AE-59 (17csi) L:54 #260

LOCATION: ROUTE 2
AT CAMBRIDGE TURNPIKE CUTOFF
CONCORD, MASSACHUSETTS

DATE: THURSDAY, SEPTEMBER 28, 1989

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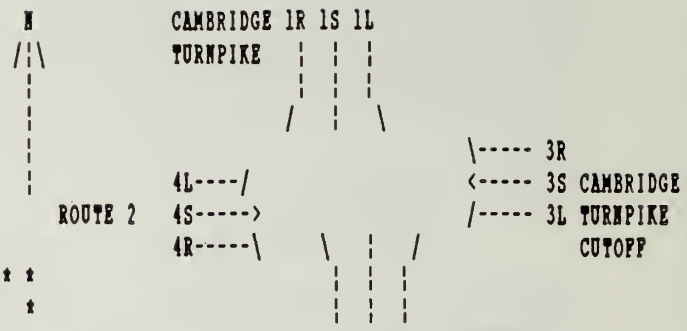
* ALL VEHICLES *
* * * * * * * * *



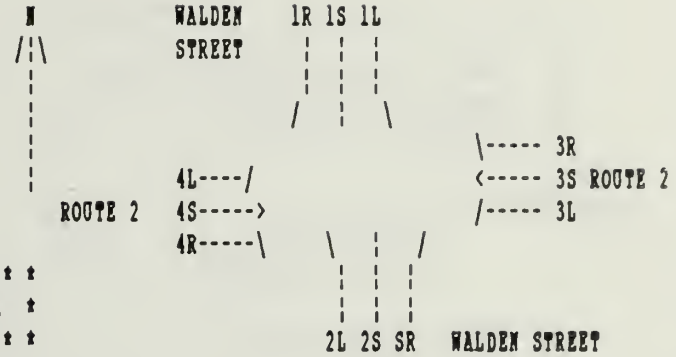
	/ 1R	| 1S	\ 1L	\/ TOT	\ 2L	| 2S	/ 2R	/\ TOT	\- 3R	< 3S	/- 3L	< TOT	-\ 4R	> 4S	-/ 4L	> TOT
7:00- 7:15	0	124	3	127	162	17	0	179	1	48	1	50	455	121	2	578
:15- 7:30	0	105	8	113	281	26	0	307	0	96	4	100	555	166	1	722
:30- 7:45	2	105	6	113	280	24	1	305	0	85	2	87	552	188	0	740
:45- 8:00	5	84	25	114	326	33	12	371	0	86	3	89	586	171	0	757
7- 8 AM	7	418	42	467	1049	100	13	1162	1	315	10	326	2148	646	3	2797
8:00- 8:15	2	72	38	112	343	42	5	390	0	91	15	106	625	195	3	823
:15- 8:30	1	95	41	137	358	33	14	405	0	74	3	77	460	196	0	656
:30- 8:45	2	84	14	100	440	35	10	485	1	99	4	104	416	163	3	582
:45- 9:00	1	75	9	85	375	51	4	430	2	93	5	100	411	135	1	547
8- 9 AM	6	326	102	434	1516	161	33	1710	3	357	27	387	1912	689	7	2608
9:00- 9:15	4	63	3	70	288	32	1	321	1	56	1	58	298	110	2	410
:15- 9:30	1	40	1	42	198	29	1	228	3	68	3	74	320	113	1	434
:30- 9:45	1	49	6	56	228	30	1	259	2	49	4	55	251	79	0	330
:45-10:00	1	27	2	30	206	34	0	240	1	48	1	50	214	76	1	291
9-10 AM	7	179	12	198	920	125	3	1048	7	221	9	237	1083	378	4	1465
3:00- 3:15	1	45	2	48	241	49	1	291	10	110	6	126	315	60	2	377
:15- 3:30	1	33	1	35	255	45	2	302	12	107	1	120	294	69	2	365
:30- 3:45	4	63	4	71	332	59	0	391	3	96	3	102	306	77	3	386
:45- 4:00	1	40	6	47	319	68	5	392	9	121	1	131	342	78	2	422
3- 4 PM	7	181	13	201	1147	221	8	1376	34	434	11	479	1257	284	9	1550
4:00- 4:15	2	46	0	48	370	58	0	428	5	116	3	124	321	88	1	410
:15- 4:30	1	32	2	35	333	62	3	398	8	122	2	132	300	89	0	389
:30- 4:45	5	56	2	63	369	74	2	445	5	95	3	103	325	83	8	416
:45- 5:00	0	35	1	36	380	69	3	452	2	137	2	141	348	88	1	437
4- 5 PM	8	169	5	182	1452	263	8	1723	20	470	10	500	1294	348	10	1652
5:00- 5:15	1	48	4	53	404	76	2	482	4	158	2	164	358	89	4	451
:15- 5:30	0	50	4	54	422	86	3	511	6	137	6	149	377	115	0	492
:30- 5:45	2	49	6	57	390	78	3	471	1	144	2	147	479	123	4	606
:45- 6:00	4	43	2	49	413	102	5	520	1	134	2	137	372	87	1	460
5- 6 PM	7	190	16	213	1629	342	13	1984	12	573	12	597	1586	414	9	2009

MANUAL TURN MOVEMENT COUNT - 15 MINUTE SUMMARY

FOR: CENTRAL TRANSPORTATION PLANNING STAFF
BY: NORTHEAST TRAFFIC COUNTS
FILE: M-HAN-CON-6 AE-59 (17csi) L:54 #260

LOCATION: ROUTE 2
AT ROUTE 126 (WALDEN STREET)
CONCORD, MASSACHUSETTS

DATE: TUESDAY, OCTOBER 3, 1989



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* ALL VEHICLES *
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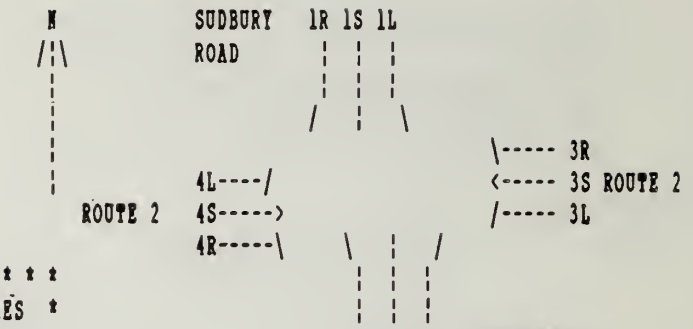
	/ 1R	| 1S	\ 1L	\/ TOT	\ 2L	| 2S	/ 2R	/\ TOT	\- 3R	< 3S	/- 3L	< TOT	-\ 4R	> 4S	-/ 4L	> TOT
7:00- 7:15	2	32	49	84	8	28	14	50	2	233	4	239	25	508	0	533
:15- 7:30	1	58	56	115	24	26	16	66	12	227	10	249	17	590	1	608
:30- 7:45	5	72	53	130	28	45	17	90	19	303	13	335	38	565	3	606
:45- 8:00	4	104	59	167	31	53	23	107	13	345	12	370	44	574	3	621
7- 8 AM	13	266	216	495	91	152	70	313	46	1108	39	1193	124	2237	7	2368
8:00- 8:15	3	80	48	131	42	60	38	140	14	394	27	435	62	585	1	648
:15- 8:30	1	92	56	149	49	70	20	139	15	371	14	400	50	590	6	646
:30- 8:45	2	70	27	99	40	49	21	110	21	326	30	377	60	489	5	554
:45- 9:00	5	59	30	94	35	49	12	96	28	293	21	342	39	419	10	468
8- 9 AM	11	301	161	473	166	228	91	485	78	1384	92	1554	211	2083	22	2316
9:00- 9:15	1	45	19	65	23	31	11	65	31	212	9	252	42	345	18	405
:15- 9:30	4	60	21	85	40	44	10	94	14	340	14	368	33	343	12	388
:30- 9:45	1	45	17	63	20	39	9	68	11	233	4	248	17	316	5	338
:45-10:00	12	34	11	57	21	33	8	62	12	248	8	268	27	286	5	318
9-10 AM	18	184	68	270	104	147	38	289	68	1033	35	1136	119	1290	40	1449
3:00- 3:15	4	38	19	61	31	31	11	73	17	253	16	286	28	304	2	334
:15- 3:30	9	41	16	66	42	42	10	94	16	344	8	368	34	347	9	390
:30- 3:45	4	32	14	50	42	39	12	93	16	342	13	371	15	310	3	328
:45- 4:00	4	41	15	60	27	43	14	84	11	342	13	366	34	323	4	361
3- 4 PM	21	152	64	237	142	155	47	344	60	1281	50	1391	111	1284	18	1413
4:00- 4:15	5	47	15	67	46	51	12	109	24	421	14	459	17	383	2	402
:15- 4:30	1	47	14	62	33	45	10	88	29	429	25	483	14	385	9	408
:30- 4:45	3	55	13	71	44	60	12	116	30	558	36	624	34	358	4	396
:45- 5:00	2	43	14	59	50	73	10	133	33	422	32	487	31	340	3	374
4- 5 PM	11	192	56	259	173	229	44	446	116	1830	107	2053	96	1466	18	1580
5:00- 5:15	4	50	18	72	56	90	13	159	15	500	26	541	29	385	8	422
:15- 5:30	6	61	11	78	68	79	10	157	15	431	40	486	28	448	3	479
:30- 5:45	3	46	17	66	57	73	12	142	26	556	23	605	42	520	2	564
:45- 6:00	1	36	11	48	41	41	10	92	41	493	18	552	17	389	3	409
5- 6 PM	14	193	57	264	222	283	45	550	97	1980	107	2184	116	1742	16	1874

MANUAL TURN MOVEMENT COUNT - 15 MINUTE SUMMARY

FOR: CENTRAL TRANSPORTATION PLANNING STAFF
BY: NORTHEAST TRAFFIC COUNTS
FILE: M-HAN-CON-7 AE-59 (17csi) L:54 #260

LOCATION: ROUTE 2
AT SUDBURY ROAD
CONCORD, MASSACHUSETTS

DATE: TUESDAY, OCTOBER 3, 1989



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* ALL VEHICLES *
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	/ 1R	| 1S	\ 1L	\/ TOT	\ 2L	| 2S	/ 2R	/\ TOT	\- 3R	< 3S	/- 3L	< TOT	-\ 4R	> 4S	-/ 4L	> TOT
7:00- 7:15	2	17	5	24	8	29	46	83	1	257	27	285	5	644	2	651
:15- 7:30	3	32	15	50	10	55	96	161	2	426	74	502	5	722	3	730
:30- 7:45	2	38	16	56	1	53	85	139	0	395	65	460	4	737	2	743
:45- 8:00	1	33	23	57	4	54	83	141	2	411	71	484	6	710	4	720
7- 8 AM	8	120	59	187	23	191	310	524	5	1489	237	1731	20	2813	11	2844
8:00- 8:15	2	30	21	53	3	45	64	112	3	420	66	489	4	685	1	690
:15- 8:30	0	25	14	39	5	50	59	114	1	415	70	486	5	602	3	610
:30- 8:45	1	21	10	32	4	59	45	108	1	405	75	481	2	537	5	544
:45- 9:00	2	18	4	24	6	55	35	96	0	389	76	465	0	503	6	509
8- 9 AM	5	94	49	148	18	209	203	430	5	1629	287	1921	11	2327	15	2353
9:00- 9:15	5	20	5	30	3	45	40	88	4	386	51	441	1	454	4	459
:15- 9:30	6	18	4	28	2	36	43	81	3	376	25	404	2	429	6	437
:30- 9:45	2	15	3	20	6	25	23	54	6	389	21	416	0	376	5	381
:45-10:00	3	13	3	19	10	19	8	37	5	394	23	422	3	341	9	353
9-10 AM	16	66	15	97	21	125	114	260	18	1545	120	1683	6	1600	24	1630
3:00- 3:15	5	61	6	72	15	35	39	89	10	424	42	476	1	576	10	587
:15- 3:30	6	51	5	62	11	31	32	74	5	418	43	466	2	515	21	538
:30- 3:45	10	39	8	57	5	24	30	59	4	461	65	530	2	441	19	462
:45- 4:00	13	31	8	52	3	18	25	46	1	451	39	491	3	389	14	406
3- 4 PM	34	182	27	243	34	108	126	268	20	1754	189	1963	8	1921	64	1993
4:00- 4:15	11	42	9	62	6	16	26	48	2	437	56	495	2	398	20	420
:15- 4:30	14	57	6	77	4	21	30	55	0	470	68	538	5	394	16	415
:30- 4:45	17	45	3	65	8	23	20	51	1	388	64	453	2	355	12	369
:45- 5:00	19	42	3	64	10	19	14	43	0	417	57	474	1	321	6	328
4- 5 PM	61	186	21	268	28	79	90	197	3	1712	245	1960	10	1468	54	1532
5:00- 5:15	12	64	10	86	11	27	53	91	1	469	71	541	0	398	11	409
:15- 5:30	6	98	13	117	11	33	84	128	3	551	86	640	1	438	14	453
:30- 5:45	11	74	8	93	3	32	79	114	1	610	69	680	0	434	11	445
:45- 6:00	10	58	10	78	4	39	70	113	0	570	55	625	1	460	15	476
5- 6 PM	39	294	41	374	29	131	286	446	5	2200	281	2486	2	1730	51	1783

MANUAL TURN MOVEMENT COUNT - 15 MINUTE SUMMARY

FOR: CENTRAL TRANSPORTATION PLANNING STAFF
BY: NORTHEAST TRAFFIC COUNTS
FILE: M-HAN-CON-8 AE-59 (17csi) L:54 #260

LOCATION: ROUTE 2
AT MAIN STREET (ROUTE 62)
CONCORD, MASSACHUSETTS

DATE: TUESDAY, OCTOBER 3, 1989

* * * * * * * * * *
* ALL VEHICLES *
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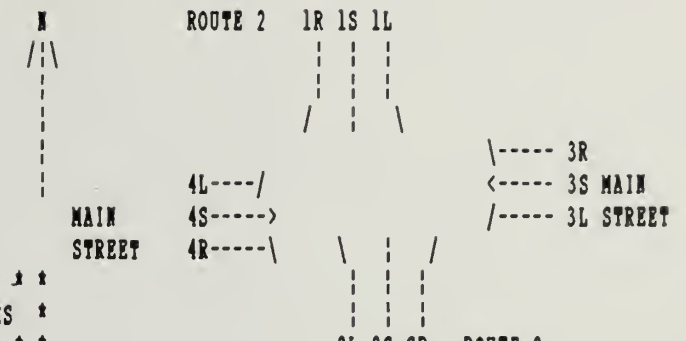


	/ 1R	¦ 1S	\ 1L	\/ TOT	\ 2L	¦ 2S	/ 2R	/\ TOT	\- 3R	< 3S	/- 3L	< TOT	-\ 4R	> 4S	-/ 4L	> TOT
7:00- 7:15	2	490	0	492	42	190	0	232	6	39	0	45	62	72	6	140
:15- 7:30	3	458	2	463	41	182	0	223	1	28	0	29	63	93	2	158
:30- 7:45	0	423	1	424	53	246	1	300	3	49	3	55	74	104	2	180
:45- 8:00	3	460	1	464	51	282	0	333	2	55	1	58	60	104	6	170
7- 8 AM	8	1831	4	1843	187	900	1	1088	12	171	4	187	259	373	16	648
8:00- 8:15	3	486	0	489	64	302	2	368	4	41	1	46	76	90	1	167
:15- 8:30	0	439	0	439	72	308	0	380	0	61	6	67	60	87	5	152
:30- 8:45	3	459	0	462	54	309	0	363	2	46	2	50	56	76	3	135
:45- 9:00	9	365	0	374	55	286	1	342	1	60	1	62	48	81	1	130
8- 9 AM	15	1749	0	1764	245	1205	3	1453	7	208	10	225	240	334	10	584
9:00- 9:15	4	341	0	345	41	162	0	203	3	54	4	61	59	80	5	144
:15- 9:30	8	282	1	291	44	239	2	285	4	53	4	61	51	74	5	130
:30- 9:45	1	274	1	276	42	214	0	256	1	49	1	51	50	53	5	108
:45-10:00	1	222	2	225	42	180	1	223	8	50	1	59	50	68	4	122
9-10 AM	14	1119	4	1137	169	795	3	967	16	206	10	232	210	275	19	504
3:00- 3:15	0	273	0	273	43	312	1	356	6	61	1	68	49	66	12	127
:15- 3:30	4	312	0	316	57	300	0	357	6	74	4	84	47	77	6	130
:30- 3:45	4	249	0	253	48	335	0	383	17	90	3	110	40	41	4	85
:45- 4:00	3	298	0	301	55	358	1	414	10	95	0	105	64	80	4	148
3- 4 PM	11	1132	0	1143	203	1305	2	1510	39	320	8	367	200	264	26	490
4:00- 4:15	2	272	0	274	60	387	1	448	16	79	2	97	74	68	4	146
:15- 4:30	2	269	0	271	62	422	0	484	12	86	1	99	80	66	1	147
:30- 4:45	2	312	0	314	55	398	2	455	19	85	2	106	68	53	4	125
:45- 5:00	3	290	0	293	49	393	1	443	3	121	2	126	61	61	8	130
4- 5 PM	9	1143	0	1152	226	1600	4	1830	50	371	7	428	283	248	17	548
5:00- 5:15	3	300	0	303	59	398	0	457	9	117	0	126	54	73	2	129
:15- 5:30	2	313	0	315	57	449	0	506	12	85	1	98	54	63	4	121
:30- 5:45	1	332	0	333	61	424	0	485	5	123	3	131	63	70	0	133
:45- 6:00	4	333	0	337	50	403	0	453	2	87	2	91	68	64	0	132
5- 6 PM	10	1278	0	1288	227	1674	0	1901	28	412	6	446	239	270	6	515

1989-1990 Counts
Done for the MDPW Route 2 Study

Automatic Traffic Recorder Counts
Intersection Turning Movement Counts

AUTOMATIC TRAFFIC RECORDER COUNT - - SUMMARY

FOR: CENTRAL TRANSPORTATION PLANNING STAFF
BY: NORTHEAST TRAFFIC COUNTS
FILE: ACT-R2-1 P-57 (12 cpi) L:69 #296

LOCATION: ROUTE 2
1 ACTON/CONCORD TOWN LINE

CITY/TOWN: ACTON, MASSACHUSETTS

DATE: MAY, 1990

	NORTHBOUND TRAFFIC			SOUTHBOUND TRAFFIC			TOTAL TRAFFIC			
	WED 5/30	THU 5/31	FRI 6/1	WED 5/30	THU 5/31	FRI 6/1	WED 5/30	THU 5/31	FRI 6/1	
12- 1A	130	171	175	48	66	89	178	237	264	12-1 A
1- 2	73	70	105	35	30	45	108	100	150	1-2
2- 3	27	30	46	31	16	28	58	46	74	2-3
3- 4	31	23	27	38	44	49	69	67	76	3-4
4- 5	34	30	29	75	67	75	109	97	104	4-5
5- 6	100	109	119	397	418	407	497	527	526	5-6
6- 7	415	446	449	1467	1548	1425	1882	1994	1874	6-7
7- 8	875	816	901	2037	2161	2199	2912	2977	3100	7-8
8- 9	1083	1096	1075	1982	1934	1913	3065	3030	2988	8-9
9-10	851	1063	1004	1250	1300	1216	2101	2363	2220	9-10
10-11	807	866	939	984	1003	1064	1791	1869	2003	10-11
11-12	824	842	1000	962	979	1093	1786	1821	2093	11-12
12- 1P	886	885	-	927	994	-	1813	1879	-	12-1 P
1- 2	857	913	-	923	911	-	1780	1824	-	1-2
2- 3	1019	1089	-	979	1051	-	1998	2140	-	2-3
3- 4	1473	1536	-	1152	1141	-	2625	2677	-	3-4
4- 5	1982	2040	-	1158	1119	-	3140	3159	-	4-5
5- 6	1971	2048	-	1300	1316	-	3271	3364	-	5-6
6- 7	1479	1446	-	952	986	-	2431	2432	-	6-7
7- 8	834	867	-	616	601	-	1450	1468	-	7-8
8- 9	692	757	-	430	448	-	1122	1205	-	8-9
9-10	604	654	-	354	368	-	958	1022	-	9-10
10-11	491	516	-	294	329	-	785	845	-	10-11
11-12	322	344	-	192	162	-	514	506	-	11-12
TOTAL	17860	18657	5869	18583	18992	9603	36443	37649	15472	TOTAL

AUTOMATIC TRAFFIC RECORDER COUNT - - SUMMARY

FOR: CENTRAL TRANSPORTATION PLANNING STAFF
BY: NORTHEAST TRAFFIC COUNTS
FILE: ACT-R2-2 P-57 (12 cpi) L:69 #296

LOCATION: ROUTE 2
2 BETWEEN ARLINGTON STREET AND NEWTOWN ROAD

CITY/TOWN: ACTON, MASSACHUSETTS

DATE: JUNE, 1990

	WESTBOUND TRAFFIC			EASTBOUND TRAFFIC			TOTAL TRAFFIC			
	TUE 6/12	WED 6/13	MON * 6/11	TUE 6/12	WED 6/13	THU 6/14	TUE 6/12	WED 6/13	THU 6/14	
12- 1A	144	172	-	31	42	24	175	214	-	12-1 A
1- 2	57	76	-	23	23	28	80	99	-	1-2
2- 3	31	39	-	27	46	51	58	85	-	2-3
3- 4	21	18	-	92	76	96	113	94	-	3-4
4- 5	31	32	-	427	446	446	458	478	-	4-5
5- 6	129	126	-	1510	1535	1474	1639	1661	-	5-6
6- 7	464	456	-	1995	2116	2054	2459	2572	-	6-7
7- 8	949	962	-	1801	1840	1702	2750	2802	-	7-8
8- 9	953	991	-	1072	1079	1020	2025	2070	-	8-9
9-10	772	814	-	773	796	718	1545	1610	-	9-10
10-11	620	672	651	761	762	729	1381	1434	-	10-11
11-12	671	682	636	712	742	710	1383	1424	-	11-12
12- 1P	702	755	713	684	784	679	1386	1539	-	12-1 P
1- 2	696	762	716	785	830	676	1481	1592	-	1-2
2- 3	820	861	787	879	886	735	1699	1747	-	2-3
3- 4	1340	-	1279	951	959	832	2291	-	-	3-4
4- 5	1869	-	1717	1127	1146	930	2996	-	-	4-5
5- 6	1958	-	1832	818	796	705	2776	-	-	5-6
6- 7	1160	-	1168	475	508	462	1635	-	-	6-7
7- 8	744	-	659	369	402	362	1113	-	-	7-8
8- 9	528	-	435	334	336	331	862	-	-	8-9
9-10	471	-	427	296	287	270	767	-	-	9-10
10-11	354	-	277	167	189	188	521	-	-	10-11
11-12	231	-	292	62	68	89	293	-	-	11-12
TOTAL	15715	7418	11589	16171	16694	15311	31886	19421	0	TOTAL

* TUBE BROKE WEDNESDAY 3:30 PM - SUBSTITUTE MONDAY DATA

AUTOMATIC TRAFFIC RECORDER COUNT - - SUMMARY

FOR: CENTRAL TRANSPORTATION PLANNING STAFF
BY: NORTHEAST TRAFFIC COUNTS
FILE: ACT-R2-3 P-57 (12 cpi) L:69 #296

LOCATION: ROUTE 2
3 WEST OF CENTRAL STREET INTERCHANGE

CITY/TOWN: ACTON, MASSACHUSETTS

DATE: JUNE, 1990

	WESTBOUND TRAFFIC			EASTBOUND TRAFFIC			TOTAL TRAFFIC			
	TUE 6/12	WED 6/13	THU 6/14	TUE 6/12	WED 6/13	THU 6/14	TUE 6/12	WED 6/13	THU 6/14	
12- 1A	143	172	179	50	74	74	193	246	253	12-1 A
1- 2	63	77	69	35	44	28	98	121	97	1-2
2- 3	31	40	47	28	25	38	59	65	85	2-3
3- 4	27	19	17	34	55	57	61	74	74	3-4
4- 5	32	42	33	103	93	106	135	135	139	4-5
5- 6	145	137	122	569	532	558	714	669	680	5-6
6- 7	523	533	554	1832	2830	1781	2355	3363	2335	6-7
7- 8	1144	1196	1036	2748	2627	2607	3892	3823	3643	7-8
8- 9	1128	1148	1157	2229	2242	2123	3357	3390	3280	8-9
9-10	914	939	853	1182	1218	1161	2096	2157	2014	9-10
10-11	715	759	797	831	915	861	1546	1674	1658	10-11
11-12	762	779	786	857	873	884	1619	1652	1670	11-12
12- 1P	789	874	926	808	840	920	1597	1714	1846	12-1 P
1- 2	804	861	819	784	893	840	1588	1754	1659	1-2
2- 3	917	970	1035	896	926	921	1813	1896	1956	2-3
3- 4	1561	1403	1637	987	984	1019	2548	2387	2656	3-4
4- 5	2262	2238	2202	1103	1145	1141	3365	3383	3343	4-5
5- 6	2281	2320	2332	1383	1379	1367	3664	3699	3699	5-6
6- 7	1341	1374	1373	867	894	883	2208	2268	2256	6-7
7- 8	787	759	764	502	563	557	1289	1322	1321	7-8
8- 9	536	589	641	385	421	431	921	1010	1072	8-9
9-10	532	542	548	357	385	366	889	927	914	9-10
10-11	370	387	378	315	313	300	685	700	678	10-11
11-12	253	303	300	175	205	211	428	508	511	11-12
TOTAL	18060	18461	18605	19060	20476	19234	37120	38937	37839	TOTAL

AUTOMATIC TRAFFIC RECORDER COUNT - - SUMMARY

FOR: CENTRAL TRANSPORTATION PLANNING STAFF
BY: NORTHEAST TRAFFIC COUNTS
FILE: ACT-PM-4 P-57 (12 cpi) L:69 #296

LOCATION: POWDER MILL ROAD
4 AT ACTON/MAYNARD TOWN LINE

CITY/TOWN: ACTON, MASSACHUSETTS

DATE: MAY, 1990

	NORTHBOUND TRAFFIC			SOUTHBOUND TRAFFIC			TOTAL TRAFFIC			
	TUE 5/22	WED 5/23	THU 5/24	TUE 5/22	WED 5/23	MON * 5/21	TUE 5/22	WED 5/23	MON * 5/21	
12- 1A	20	19	15	34	50	50	54	69	64	12-1 A
1- 2	12	5	9	13	14	18	25	19	27	1-2
2- 3	3	12	10	10	12	19	13	24	25	2-3
3- 4	6	6	4	10	6	11	16	12	14	3-4
4- 5	10	20	11	6	24	38	16	44	49	4-5
5- 6	79	69	81	34	25	40	113	94	111	5-6
6- 7	328	316	318	118	118	137	446	434	448	6-7
7- 8	523	516	550	318	295	362	841	811	836	7-8
8- 9	496	512	508	350	403	358	846	915	841	8-9
9-10	376	377	383	333	342	366	709	719	745	9-10
10-11	328	358	340	363	388	320	691	746	642	10-11
11-12	369	389	392	432	469	451	801	858	799	11-12
12- 1P	499	451	493	529	485	485	1028	936	944	12-1 P
1- 2	444	380	439	454	-	379	898	-	787	1-2
2- 3	419	392	476	425	-	428	844	-	823	2-3
3- 4	414	433	411	558	-	551	972	-	934	3-4
4- 5	394	447	418	672	-	604	1066	-	980	4-5
5- 6	427	419	430	629	-	612	1056	-	1016	5-6
6- 7	319	364	373	472	-	413	791	-	708	6-7
7- 8	237	271	281	357	-	333	594	-	554	7-8
8- 9	211	218	217	294	-	192	505	-	333	8-9
9-10	149	156	186	197	-	186	346	-	297	9-10
10-11	88	94	124	134	-	102	222	-	161	10-11
11-12	42	48	50	77	-	96	119	-	140	11-12
TOTAL	6193	6272	6519	6819	2631	6551	13012	5681	12278	TOTAL

* TUBE BROKE ABOUT 1:00 PM WEDNESDAY - MONDAY DATA SUBSTITUTED

AUTOMATIC TRAFFIC RECORDER COUNT - - SUMMARY

FOR: CENTRAL TRANSPORTATION PLANNING STAFF
BY: NORTHEAST TRAFFIC COUNTS
FILE: ACT-PKR-5 P-57 (12 cpi) L:69 #296

LOCATION: PARKER STREET
5 AT ACTON/MAYNARD TOWN LINE

CITY/TOWN: ACTON, MASSACHUSETTS

DATE: MAY, 1990

	SOUTHBOUND TRAFFIC			SOUTHBOUND TRAFFIC			TOTAL TRAFFIC			
	TUE 5/22	WED 5/23	THU 5/24	TUE 5/22	WED 5/23	MON 5/21	TUE 5/22	WED 5/23	MON 5/21	
12- 1A	7	14	15	3	5	4	10	19	19	12-1 A
1- 2	4	5	5	1	1	1	5	6	6	1-2
2- 3	2	1	1	0	1	1	2	2	2	2-3
3- 4	0	1	0	7	1	3	7	2	3	3-4
4- 5	3	1	3	1	5	4	4	6	7	4-5
5- 6	6	8	10	32	31	34	38	39	44	5-6
6- 7	21	25	22	143	150	139	164	175	161	6-7
7- 8	47	57	56	177	165	171	224	222	227	7-8
8- 9	78	79	80	126	127	143	204	206	223	8-9
9-10	64	64	89	68	87	54	132	151	143	9-10
10-11	57	53	64	81	63	87	138	116	151	10-11
11-12	92	99	82	63	81	94	155	180	176	11-12
12- 1P	112	109	98	91	71	71	203	180	169	12-1 P
1- 2	83	72	99	89	86	103	172	158	202	1-2
2- 3	114	86	115	81	84	75	195	170	190	2-3
3- 4	131	120	137	121	128	110	252	248	247	3-4
4- 5	180	173	151	89	88	102	269	261	253	4-5
5- 6	152	168	177	111	100	67	263	268	244	5-6
6- 7	133	139	135	64	81	87	197	220	222	6-7
7- 8	95	110	125	81	82	76	176	192	201	7-8
8- 9	89	85	88	51	52	48	140	137	136	8-9
9-10	51	69	62	18	24	12	69	93	74	9-10
10-11	33	37	34	12	16	27	45	53	61	10-11
11-12	23	28	35	15	17	16	38	45	51	11-12
TOTAL	1577	1603	1683	1525	1546	1529	3102	3149	3212	TOTAL

AUTOMATIC TRAFFIC RECORDER COUNT - - SUMMARY

FOR: CENTRAL TRANSPORTATION PLANNING STAFF
BY: NORTHEAST TRAFFIC COUNTS
FILE: ACT-R27-6 P-57 (12 cpi) L:69 #296

LOCATION: ROUTE 27
6 AT ACTON/MAYNARD TOWN LINE

CITY/TOWN: ACTON, MASSACHUSETTS

DATE: MAY, 1990

	NORTHBOUND TRAFFIC			SOUTHBOUND TRAFFIC			TOTAL TRAFFIC			
	TUE 5/22	WED 5/23	THU 5/24	TUE 5/22	WED 5/23	THU 5/24	TUE 5/22	WED 5/23	THU 5/24	
12- 1A	23	49	37	36	39	31	59	88	68	12-1 A
1- 2	20	16	11	7	16	13	27	32	24	1-2
2- 3	6	13	7	2	9	9	8	22	16	2-3
3- 4	9	6	7	4	6	5	13	12	12	3-4
4- 5	7	5	7	14	7	10	21	12	17	4-5
5- 6	52	57	85	73	75	77	125	132	162	5-6
6- 7	263	259	258	291	281	290	554	540	548	6-7
7- 8	486	473	458	630	643	658	1116	1116	1116	7-8
8- 9	531	524	576	645	661	682	1176	1185	1258	8-9
9-10	364	384	415	357	329	366	721	713	781	9-10
10-11	314	367	364	335	332	329	649	699	693	10-11
11-12	399	423	469	349	366	382	748	789	851	11-12
12- 1P	444	445	472	384	428	433	828	873	905	12-1 P
1- 2	389	408	444	363	362	417	752	770	861	1-2
2- 3	429	445	461	368	372	397	797	817	858	2-3
3- 4	592	612	605	400	396	423	992	1008	1028	3-4
4- 5	751	749	722	454	435	477	1205	1184	1199	4-5
5- 6	829	813	833	503	517	510	1332	1330	1343	5-6
6- 7	487	503	593	374	434	437	861	937	1030	6-7
7- 8	365	365	378	311	328	309	676	693	687	7-8
8- 9	236	237	287	261	221	272	497	458	559	8-9
9-10	167	224	215	187	193	215	354	417	430	9-10
10-11	146	160	165	107	110	143	253	270	308	10-11
11-12	77	68	82	63	62	90	140	130	172	11-12
TOTAL	7386	7605	7951	6518	6622	6975	13904	14227	14926	TOTAL

AUTOMATIC TRAFFIC RECORDER COUNT - - SUMMARY

FOR: CENTRAL TRANSPORTATION PLANNING STAFF
BY: NORTHEAST TRAFFIC COUNTS
FILE: ACT-STOW-7 P-57 (12 cpi) L:69 #296

LOCATION: STOW ROAD
7 AT ACTON/STOW TOWN LINE

CITY/TOWN: ACTON, MASSACHUSETTS

DATE: MAY, 1990

	SOUTHBOUND TRAFFIC			NORTHBOUND TRAFFIC			TOTAL TRAFFIC			
	TUE 5/22	WED 5/23	THU 5/24	TUE 5/22	WED 5/23	THU 5/24	TUE 5/22	WED 5/23	THU 5/24	
12- 1A	3	5	4	1	1	2	4	6	6	12-1 A
1- 2	4	2	3	1	1	1	5	3	4	1-2
2- 3	0	3	0	1	2	1	1	5	1	2-3
3- 4	0	0	0	0	1	2	0	1	2	3-4
4- 5	0	0	0	4	1	3	4	1	3	4-5
5- 6	5	3	1	22	16	20	27	19	21	5-6
6- 7	19	22	26	94	86	85	113	108	111	6-7
7- 8	83	72	71	166	157	165	249	229	236	7-8
8- 9	79	77	84	117	119	128	196	196	212	8-9
9-10	37	53	44	50	74	61	87	127	105	9-10
10-11	48	38	52	47	45	49	95	83	101	10-11
11-12	42	48	54	51	50	47	93	98	101	11-12
12- 1P	51	66	55	39	50	48	90	116	103	12-1 P
1- 2	41	51	57	43	34	54	84	85	111	1-2
2- 3	68	53	64	57	52	46	125	105	110	2-3
3- 4	96	90	78	66	41	51	162	131	129	3-4
4- 5	149	118	125	63	71	69	212	189	194	4-5
5- 6	158	135	140	85	85	81	243	220	221	5-6
6- 7	99	114	128	65	57	61	164	171	189	6-7
7- 8	61	48	67	37	34	51	98	82	118	7-8
8- 9	38	56	44	32	22	28	70	78	72	8-9
9-10	32	38	35	15	13	26	47	51	61	9-10
10-11	24	17	15	8	13	20	32	30	35	10-11
11-12	25	17	22	7	3	12	32	20	34	11-12
TOTAL	1162	1126	1169	1071	1028	1111	2233	2154	2280	TOTAL

AUTOMATIC TRAFFIC RECORDER COUNT - - SUMMARY

FOR: CENTRAL TRANSPORTATION PLANNING STAFF
BY: NORTHEAST TRAFFIC COUNTS
FILE: ACT-WIL-8 P-57 (12 cpi) L:69 #296

LOCATION: WILLOW ROAD
8 AT ACTON/STOW TOWN LINE

CITY/TOWN: ACTON, MASSACHUSETTS

DATE: MAY, 1990

	NORTHBOUND TRAFFIC			SOUTHBOUND TRAFFIC			TOTAL TRAFFIC			
	TUE 5/22	WED 5/23	THU 5/24	TUE 5/22	WED 5/23	THU 5/24	TUE 5/22	WED 5/23	THU 5/24	
12- 1A	5	9	3	6	4	4	11	13	7	12-1 A
1- 2	5	1	3	0	2	2	5	3	5	1-2
2- 3	0	0	0	1	0	1	1	0	1	2-3
3- 4	2	1	1	4	1	2	6	2	3	3-4
4- 5	2	2	2	1	0	0	3	2	2	4-5
5- 6	11	18	16	11	10	12	22	28	28	5-6
6- 7	62	63	68	30	35	39	92	98	107	6-7
7- 8	149	150	144	121	109	110	270	259	254	7-8
8- 9	138	160	152	132	127	117	270	287	269	8-9
9-10	85	111	86	63	83	81	148	194	167	9-10
10-11	74	63	62	49	77	61	123	140	123	10-11
11-12	76	93	98	76	70	73	152	163	171	11-12
12- 1P	78	81	86	84	101	92	162	182	178	12-1 P
1- 2	76	83	86	67	70	100	143	153	186	1-2
2- 3	99	97	94	70	65	80	169	162	174	2-3
3- 4	115	120	117	88	110	110	203	230	227	3-4
4- 5	126	135	121	124	144	131	250	279	252	4-5
5- 6	179	185	176	153	135	154	332	320	330	5-6
6- 7	134	131	124	93	114	120	227	245	244	6-7
7- 8	77	85	88	73	79	88	150	164	176	7-8
8- 9	50	48	80	63	54	67	113	102	147	8-9
9-10	22	37	44	44	51	50	66	88	94	9-10
10-11	14	19	25	25	29	28	39	48	53	10-11
11-12	7	10	10	19	23	29	26	33	39	11-12
TOTAL	1586	1702	1686	1397	1493	1551	2983	3195	3237	TOTAL

AUTOMATIC TRAFFIC RECORDER COUNT - - SUMMARY

FOR: CENTRAL TRANSPORTATION PLANNING STAFF
BY: NORTHEAST TRAFFIC COUNTS
FILE: ACT-SUM-9 P-57 (12 cpi) L:69 #296

LOCATION: SUMMER STREET
9 AT ACTON/STOW TOWN LINE

CITY/TOWN: ACTON, MASSACHUSETTS

DATE: MAY, 1990

	EASTBOUND TRAFFIC			WESTBOUND TRAFFIC			TOTAL TRAFFIC			
	WED 5/30	THU 5/31	FRI 6/1	WED 5/30	THU 5/31	FRI 6/1	WED 5/30	THU 5/31	FRI 6/1	
12- 1A	2	8	5	5	7	14	7	15	19	12-1 A
1- 2	0	1	2	3	1	7	3	2	9	1-2
2- 3	0	0	0	0	0	3	0	0	3	2-3
3- 4	0	0	0	0	1	1	0	1	1	3-4
4- 5	0	1	1	0	1	0	0	2	1	4-5
5- 6	4	5	4	6	9	11	10	14	15	5-6
6- 7	36	40	33	26	30	36	62	70	69	6-7
7- 8	83	94	90	62	76	72	145	170	162	7-8
8- 9	74	70	83	80	73	84	154	143	167	8-9
9-10	28	40	49	36	39	42	64	79	91	9-10
10-11	42	42	36	33	48	45	75	90	81	10-11
11-12	38	71	67	43	44	50	81	115	117	11-12
12- 1P	48	47	-	54	58	-	102	105	-	12-1 P
1- 2	34	43	-	53	52	-	87	95	-	1-2
2- 3	44	39	-	60	69	-	104	108	-	2-3
3- 4	63	58	-	64	80	-	127	138	-	3-4
4- 5	80	73	-	97	106	-	177	179	-	4-5
5- 6	87	100	-	127	130	-	214	230	-	5-6
6- 7	68	74	-	88	115	-	156	189	-	6-7
7- 8	48	49	-	66	76	-	114	125	-	7-8
8- 9	48	43	-	46	51	-	94	94	-	8-9
9-10	26	35	-	34	35	-	60	70	-	9-10
10-11	14	21	-	30	20	-	44	41	-	10-11
11-12	7	7	-	8	18	-	15	25	-	11-12
TOTAL	874	961	370	1021	1139	365	1895	2100	735	TOTAL

AUTOMATIC TRAFFIC RECORDER COUNT - - SUMMARY

FOR: CENTRAL TRANSPORTATION PLANNING STAFF
BY: NORTHEAST TRAFFIC COUNTS
FILE: ACT-111-10 P-57 (12 cpi) L:69 #296

LOCATION: ROUTE 111
10 AT ACTON/BOXBOROUGH TOWN LINE

CITY/TOWN: ACTON, MASSACHUSETTS

DATE: MAY, 1990

	EASTBOUND TRAFFIC			WESTBOUND TRAFFIC			TOTAL TRAFFIC			
	WED 5/30	THU 5/31	FRI 6/1	WED 5/30	THU 5/31	FRI 6/1	WED 5/30	THU 5/31	FRI 6/1	
12- 1A	11	23	33	24	38	35	35	61	68	12-1 A
1- 2	5	6	12	7	12	14	12	18	26	1-2
2- 3	1	2	5	1	2	13	2	4	18	2-3
3- 4	3	2	4	1	2	5	4	4	9	3-4
4- 5	7	6	6	5	5	8	12	11	14	4-5
5- 6	48	55	38	8	16	18	56	71	56	5-6
6- 7	273	290	256	83	82	91	356	372	347	6-7
7- 8	500	506	529	225	233	220	725	739	749	7-8
8- 9	484	475	475	321	285	315	805	760	790	8-9
9-10	301	298	319	242	245	227	543	543	546	9-10
10-11	234	236	274	201	186	211	435	422	485	10-11
11-12	305	342	351	258	245	280	563	587	631	11-12
12- 1P	359	351	-	286	312	-	645	663	-	12-1 P
1- 2	312	275	-	285	295	-	597	570	-	1-2
2- 3	262	269	-	298	296	-	560	565	-	2-3
3- 4	340	355	-	350	341	-	690	696	-	3-4
4- 5	392	373	-	386	457	-	778	830	-	4-5
5- 6	531	586	-	493	461	-	1024	1047	-	5-6
6- 7	326	380	-	410	449	-	736	829	-	6-7
7- 8	271	303	-	298	333	-	569	636	-	7-8
8- 9	188	215	-	235	279	-	423	494	-	8-9
9-10	103	147	-	217	208	-	320	355	-	9-10
10-11	88	103	-	123	155	-	211	258	-	10-11
11-12	53	50	-	67	87	-	120	137	-	11-12
TOTAL	5397	5648	2302	4824	5024	1437	10221	10672	3739	TOTAL

AUTOMATIC TRAFFIC RECORDER COUNT - - SUMMARY

FOR: CENTRAL TRANSPORTATION PLANNING STAFF
BY: NORTHEAST TRAFFIC COUNTS
FILE: ACT-LIT-11 P-57 (12 cpi) L:69 #296

LOCATION: LITTLEFIELD ROAD
11 AT ACTON/BOXBOROUGH TOWN LINE

CITY/TOWN: ACTON, MASSACHUSETTS

DATE: MAY, 1990

	NORTHBOUND TRAFFIC			SOUTHBOUND TRAFFIC			TOTAL TRAFFIC			
	WED 5/30	THU 5/31	FRI 6/1	WED 5/30	THU 5/31	FRI 6/1	WED 5/30	THU 5/31	FRI 6/1	
12- 1A	1	3	7	1	7	1	2	10	8	12-1 A
1- 2	1	2	1	1	1	2	2	3	3	1-2
2- 3	1	0	0	1	0	0	2	0	0	2-3
3- 4	0	0	0	0	0	1	0	0	1	3-4
4- 5	2	1	2	0	1	0	2	2	2	4-5
5- 6	1	3	2	5	4	6	6	7	8	5-6
6- 7	15	15	16	16	19	17	31	34	33	6-7
7- 8	12	20	15	40	45	41	52	65	56	7-8
8- 9	13	14	27	36	42	35	49	56	62	8-9
9-10	17	8	16	28	31	19	45	39	35	9-10
10-11	17	15	18	20	11	18	37	26	36	10-11
11-12	19	31	27	19	24	18	38	55	45	11-12
12- 1P	29	30	-	16	14	-	45	44	-	12-1 P
1- 2	30	27	-	27	21	-	57	48	-	1-2
2- 3	24	34	-	19	14	-	43	48	-	2-3
3- 4	40	40	-	28	26	-	68	66	-	3-4
4- 5	47	55	-	29	43	-	76	98	-	4-5
5- 6	54	40	-	43	30	-	97	70	-	5-6
6- 7	51	34	-	23	16	-	74	50	-	6-7
7- 8	35	23	-	22	20	-	57	43	-	7-8
8- 9	30	32	-	14	9	-	44	41	-	8-9
9-10	20	18	-	18	6	-	38	24	-	9-10
10-11	9	9	-	2	7	-	11	16	-	10-11
11-12	7	4	-	4	1	-	11	5	-	11-12
TOTAL	475	458	131	412	392	158	887	850	289	TOTAL

AUTOMATIC TRAFFIC RECORDER COUNT - - SUMMARY

FOR: CENTRAL TRANSPORTATION PLANNING STAFF
BY: NORTHEAST TRAFFIC COUNTS
FILE: ACT-NEW-12 P-57 (12 cpi) L:69 #296

LOCATION: NEWTOWN ROAD
12 NORTH OF BOXBORO ROAD

CITY/TOWN: ACTON, MASSACHUSETTS

DATE: JUNE, 1990

	EASTBOUND TRAFFIC			WESTBOUND TRAFFIC			TOTAL TRAFFIC			
	WED 5/30	THU 5/31	FRI 6/1	WED 5/30	THU 5/31	FRI 6/1	WED 5/30	THU 5/31	FRI 6/1	
12- 1A	8	11	12	10	11	18	18	22	30	12-1 A
1- 2	4	6	6	3	3	16	7	9	22	1-2
2- 3	1	1	0	2	4	1	3	5	1	2-3
3- 4	0	6	1	2	5	4	2	11	5	3-4
4- 5	4	5	7	4	5	8	8	10	15	4-5
5- 6	6	8	14	31	32	27	37	40	41	5-6
6- 7	49	52	64	114	122	123	163	174	187	6-7
7- 8	174	169	183	228	255	230	402	424	413	7-8
8- 9	147	222	220	213	264	214	360	486	434	8-9
9-10	121	114	112	131	127	120	252	241	232	9-10
10-11	113	97	116	100	134	100	213	231	216	10-11
11-12	136	148	153	126	138	131	262	286	284	11-12
12- 1P	153	150	-	152	159	-	305	309	-	12-1 P
1- 2	144	143	-	122	142	-	266	285	-	1-2
2- 3	155	139	-	115	125	-	270	264	-	2-3
3- 4	187	182	-	160	157	-	347	339	-	3-4
4- 5	235	269	-	202	210	-	437	479	-	4-5
5- 6	333	347	-	214	255	-	547	602	-	5-6
6- 7	219	197	-	153	174	-	372	371	-	6-7
7- 8	136	147	-	124	116	-	260	263	-	7-8
8- 9	95	117	-	98	116	-	193	233	-	8-9
9-10	79	95	-	79	79	-	158	174	-	9-10
10-11	44	35	-	46	50	-	90	85	-	10-11
11-12	34	36	-	33	28	-	67	64	-	11-12
TOTAL	2577	2696	888	2462	2711	992	5039	5407	1880	TOTAL

AUTOMATIC TRAFFIC RECORDER COUNT - - SUMMARY

FOR: CENTRAL TRANSPORTATION PLANNING STAFF
BY: NORTHEAST TRAFFIC COUNTS
FILE: ACT-NAG-13 P-57 (12 cpi) L:69 #296

LOCATION: NAGOG HILL ROAD
13 NORTH OF FORT POND ROAD

CITY/TOWN: ACTON, MASSACHUSETTS

DATE: JUNE, 1990

	NORTHBOUND TRAFFIC			SOUTHBOUND TRAFFIC			TOTAL TRAFFIC			
	TUE 6/12	WED 6/13	THU 6/14	TUE 6/12	WED 6/13	THU 6/14	TUE 6/12	WED 6/13	THU 6/14	
12- 1A	3	1	2	4	2	6	7	3	8	12-1 A
1- 2	0	0	0	1	3	4	1	3	4	1-2
2- 3	0	0	0	0	0	1	0	0	1	2-3
3- 4	0	0	1	0	0	0	0	0	1	3-4
4- 5	0	0	0	1	1	2	1	1	2	4-5
5- 6	2	2	1	0	1	3	2	3	4	5-6
6- 7	2	4	3	4	7	14	6	11	17	6-7
7- 8	24	20	21	28	18	19	52	38	40	7-8
8- 9	24	14	27	9	15	18	33	29	45	8-9
9-10	20	19	19	9	8	9	29	27	28	9-10
10-11	11	5	9	16	12	10	27	17	19	10-11
11-12	17	19	9	13	8	19	30	27	28	11-12
12- 1P	17	18	19	21	12	20	38	30	39	12-1 P
1- 2	26	19	27	14	18	13	40	37	40	1-2
2- 3	13	21	24	20	18	15	33	39	39	2-3
3- 4	20	32	16	18	23	14	38	55	30	3-4
4- 5	32	35	28	23	25	26	55	60	54	4-5
5- 6	36	45	49	33	26	36	69	71	85	5-6
6- 7	42	42	40	19	21	19	61	63	59	6-7
7- 8	27	22	18	13	18	16	40	40	34	7-8
8- 9	23	16	24	19	20	21	42	36	45	8-9
9-10	8	21	15	24	12	17	32	33	32	9-10
10-11	8	11	8	4	9	11	12	20	19	10-11
11-12	3	2	7	7	7	17	10	9	24	11-12
TOTAL	358	368	367	300	284	330	658	652	697	TOTAL

AUTOMATIC TRAFFIC RECORDER COUNT - - SUMMARY

FOR: CENTRAL TRANSPORTATION PLANNING STAFF
BY: NORTHEAST TRAFFIC COUNTS
FILE: ACT-R27-14 P-57 (12 cpi) L:69 #296

LOCATION: ROUTE 27
14 AT ACTON/WESTFORD TOWN LINE

CITY/TOWN: ACTON, MASSACHUSETTS

DATE: JUNE, 1990

	NORTHBOUND TRAFFIC			SOUTHBOUND TRAFFIC			TOTAL TRAFFIC			
	TUE 6/12	WED 6/13	THU 6/14	TUE 6/12	WED 6/13	THU 6/14	TUE 6/12	WED 6/13	THU 6/14	
12- 1A	14	19	16	19	9	7	33	28	23	12-1 A
1- 2	12	12	5	3	8	8	15	20	13	1-2
2- 3	6	4	4	0	3	2	6	7	6	2-3
3- 4	2	1	6	9	6	5	11	7	11	3-4
4- 5	6	7	4	8	9	8	14	16	12	4-5
5- 6	11	16	15	40	35	43	51	51	58	5-6
6- 7	114	120	113	300	279	270	414	399	383	6-7
7- 8	284	253	260	351	353	329	635	606	589	7-8
8- 9	249	243	253	290	306	313	539	549	566	8-9
9-10	169	194	178	189	208	216	358	402	394	9-10
10-11	170	136	165	170	168	170	340	304	335	10-11
11-12	184	176	192	175	187	186	359	363	378	11-12
12- 1P	196	192	221	198	189	216	394	381	437	12-1 P
1- 2	216	199	193	206	169	228	422	368	421	1-2
2- 3	203	202	257	194	213	219	397	415	476	2-3
3- 4	342	344	336	214	219	225	556	563	561	3-4
4- 5	374	362	377	241	271	262	615	633	639	4-5
5- 6	420	443	415	327	353	329	747	796	744	5-6
6- 7	234	266	279	233	213	237	467	479	516	6-7
7- 8	162	179	192	175	137	180	337	316	372	7-8
8- 9	152	145	154	121	130	129	273	275	283	8-9
9-10	129	133	150	87	67	84	216	200	234	9-10
10-11	52	52	63	48	47	72	100	99	135	10-11
11-12	48	46	43	14	30	28	62	76	71	11-12
TOTAL	3749	3744	3891	3612	3609	3766	7361	7353	7657	TOTAL

AUTOMATIC TRAFFIC RECORDER COUNT - - SUMMARY

FOR: CENTRAL TRANSPORTATION PLANNING STAFF
BY: NORTHEAST TRAFFIC COUNTS
FILE: ACT-WES-15 P-57 (12 cpi) L:69 #296

LOCATION: WEST STREET
15 BETWEEN POPE ROAD AND SOUTH STREET

CITY/TOWN: CARLISLE, MASSACHUSETTS

DATE: JUNE, 1990

	SOUTHBOUND TRAFFIC			NORTHBOUND TRAFFIC			TOTAL TRAFFIC			
	TUE 6/12	WED 6/13	THU 6/14	TUE 6/12	WED 6/13	THU 6/14	TUE 6/12	WED 6/13	THU 6/14	
12- 1A	1	1	5	2	6	4	3	7	9	12-1 A
1- 2	0	1	1	2	4	0	2	5	1	1-2
2- 3	1	0	0	2	1	1	3	1	1	2-3
3- 4	0	0	0	0	0	0	0	0	0	3-4
4- 5	0	0	0	1	0	0	1	0	0	4-5
5- 6	3	6	4	1	4	0	4	10	4	5-6
6- 7	40	32	35	22	30	30	62	62	65	6-7
7- 8	89	87	89	70	69	69	159	156	158	7-8
8- 9	69	62	69	75	57	55	144	119	124	8-9
9-10	43	52	25	38	43	45	81	95	70	9-10
10-11	22	26	27	36	38	29	58	64	56	10-11
11-12	25	34	29	36	48	49	61	82	78	11-12
12- 1P	29	29	24	46	54	52	75	83	76	12-1 P
1- 2	36	27	20	34	44	40	70	71	60	1-2
2- 3	23	32	20	54	45	56	77	77	76	2-3
3- 4	28	29	32	74	70	58	102	99	90	3-4
4- 5	39	46	48	103	84	112	142	130	160	4-5
5- 6	67	53	74	123	108	89	190	161	163	5-6
6- 7	53	52	43	102	88	85	155	140	128	6-7
7- 8	38	20	50	63	48	62	101	68	112	7-8
8- 9	20	11	27	40	48	36	60	59	63	8-9
9-10	17	10	14	41	32	52	58	42	66	9-10
10-11	8	3	16	24	20	20	32	23	36	10-11
11-12	7	4	6	17	20	20	24	24	26	11-12
TOTAL	658	617	658	1006	961	964	1664	1578	1622	TOTAL

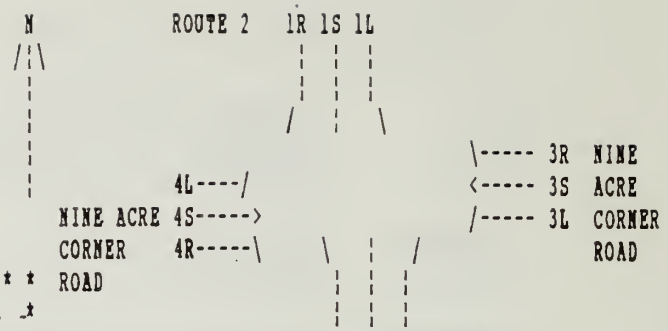
MANUAL TURN MOVEMENT COUNT - 15 MINUTE SUMMARY

FOR: CENTRAL TRANSPORTATION PLANNING STAFF
BY: NORTHEAST TRAFFIC COUNTS
FILE: M-ACT-2-9-AC AD-59 (17csi) L:67 #296

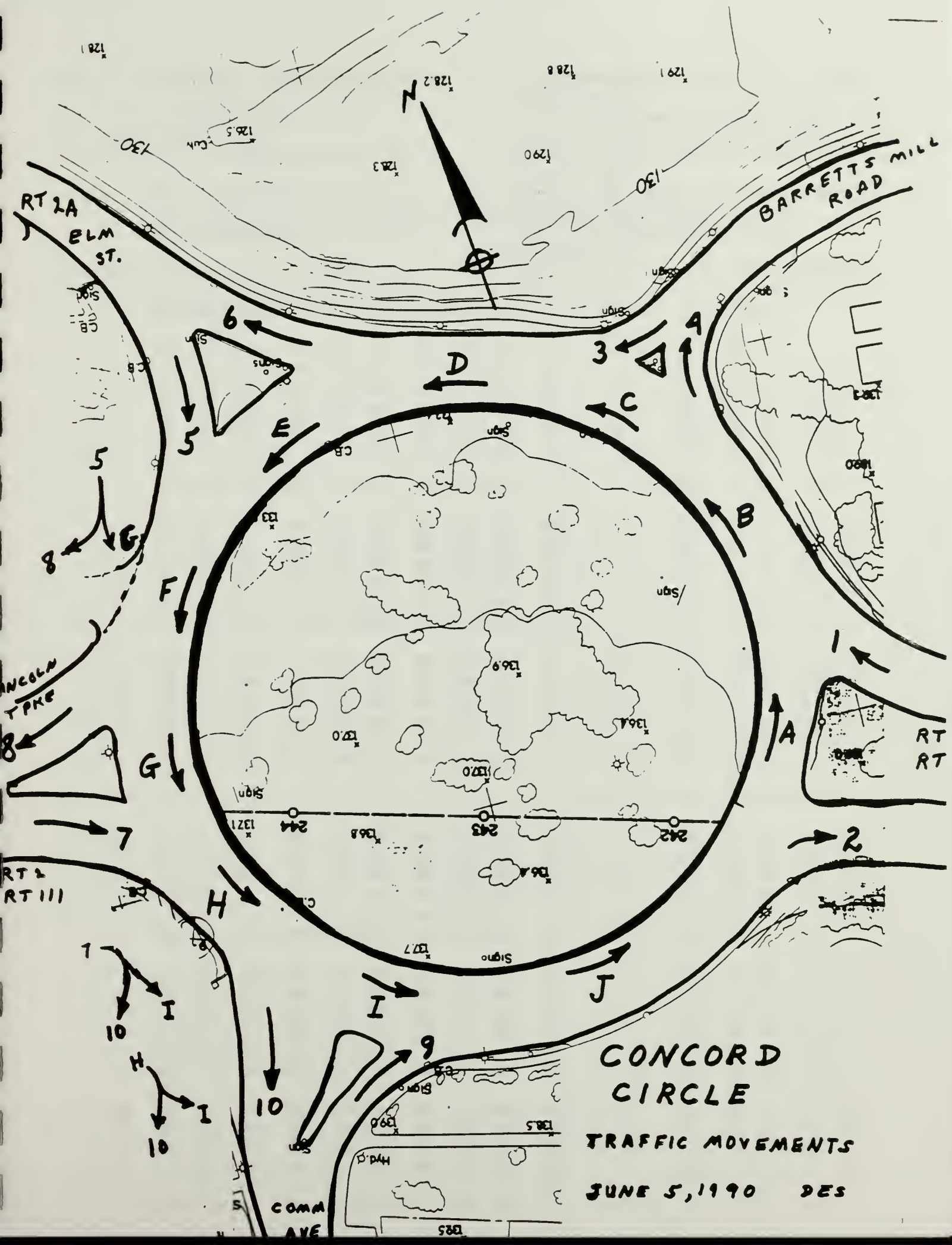
LOCATION: ROUTE 2
1 AT NINE ACRE CORNER ROAD
CONCORD, MASSACHUSETTS

DATE: WEDNESDAY, JUNE 6, 1990

* * * * * * * * *
* ALL VEHICLES *
* * * * * * * * *



	/ 1R	¦ 1S	\ 1L	\/ TOT	\ 2L	¦ 2S	/ 2R	/\ TOT	\- 3R	< 3S	/- 3L	< TOT	-\ 4R	> 4S	-/ 4L	> TOT
7:00- 7:15	14	627	4	645	21	207	6	234	0	12	2	14	49	18	0	67
:15- 7:30	16	594	6	616	25	315	11	351	0	9	0	9	66	44	13	123
:30- 7:45	9	574	8	591	21	395	12	428	0	6	0	6	93	56	13	162
:45- 8:00	29	473	13	515	43	346	30	419	0	29	0	29	78	46	18	142
7- 8 AM	68	2268	31	2367	110	1263	59	1432	0	56	2	58	286	164	44	494
8:00- 8:15	30	507	9	546	42	399	3	444	2	47	2	51	58	55	15	128
:15- 8:30	39	440	10	489	48	413	11	472	0	20	0	20	58	56	20	134
:30- 8:45	35	433	6	474	42	374	9	425	0	59	0	59	54	38	24	116
:45- 9:00	58	380	18	456	30	349	14	393	0	54	0	54	46	47	21	114
8- 9 AM	162	1760	43	1965	162	1535	37	1734	2	180	2	184	216	196	80	492
9:00- 9:15	25	354	9	388	35	259	8	302	0	44	1	45	24	46	19	89
:15- 9:30	29	387	10	426	31	250	3	284	0	21	3	24	34	42	18	94
:30- 9:45	31	321	5	357	32	311	9	352	1	27	8	36	36	29	20	85
:45-10:00	33	309	8	350	29	288	4	321	2	26	2	30	35	28	16	79
9-10 AM	118	1371	32	1521	127	1108	24	1259	3	118	14	135	129	145	73	347
3:00- 3:15	6	310	9	325	29	346	6	381	4	27	6	37	28	30	55	113
:15- 3:30	16	317	19	352	35	360	6	401	4	61	10	75	24	50	32	106
:30- 3:45	25	364	6	395	41	304	8	353	3	30	4	37	35	36	44	115
:45- 4:00	15	260	16	291	28	287	4	319	2	41	3	46	28	39	29	96
3- 4 PM	62	1251	50	1363	133	1297	24	1454	13	159	23	195	115	155	160	430
4:00- 4:15	18	380	5	403	32	301	3	336	9	53	20	82	48	42	31	121
:15- 4:30	9	369	4	382	71	497	0	568	2	47	12	61	38	34	30	102
:30- 4:45	17	314	13	344	46	433	1	480	4	40	13	57	21	35	51	107
:45- 5:00	9	347	10	366	50	492	0	542	2	44	8	54	35	54	41	130
4- 5 PM	53	1410	32	1495	199	1723	4	1926	17	184	53	254	142	165	153	460
5:00- 5:15	27	362	4	393	63	458	4	525	13	48	14	75	18	51	39	108
:15- 5:30	21	398	5	424	45	484	9	538	3	35	13	51	34	33	29	96
:30- 5:45	14	388	9	411	69	477	8	554	6	60	9	75	38	28	32	98
:45- 6:00	15	391	8	414	62	496	4	562	4	45	10	59	32	31	33	96
5- 6 PM	77	1539	26	1642	239	1915	25	2179	26	188	46	260	122	143	133	398


CONCORD
CIRCLE
TRAFFIC MOVEMENTS
JUNE 5, 1990 DES
BARRETTS MILL ROAD
RT 2A
ELM ST.
RT 2
RT 111
COMM AVE
A
B
C
D
E
F
G
H
I
J
1
2
3
4
5
6
7
8
9
10

MANUAL TURN MOVEMENT COUNT - 15 MINUTE SUMMARY

FOR: CENTRAL TRANSPORTATION PLANNING STAFF
BY: NORTHEAST TRAFFIC COUNTS
FILE: M-AC-CONC-C AD-61(179) (17csi) L:67 #296

LOCATION: CONCORD CIRCLE (ROUTE 2, 2A)
2 ROUTE 111, BARRETTS MILL RD., COMMONWEALTH AVE.
CONCORD, MASSACHUSETTS

DATE: TUESDAY, JUNE 5, 1990

VOLUMES ENTERING AND LEAVING CIRCLE ON:

1,2 = ROUTE 2 & 2A

3,4 = BARRETTS MILL ROAD

5,6 = RTE. 2A (ELM ST.)

7,8 = RTE. 2 & 111 (LINCOLN TPKE.)

9,10 = COMMONWEALTH AVENUE

	ROUTE 2 AND 2A			BARRETTS MILL RD.			ROUTE 2A(ELM ST.)			ROUTE 2 AND 111			COMMONWEALTH AVE.		
	1 IN	2 OUT	TOT	3 IN	4 OUT	TOT	5 IN	6 OUT	TOT	7 IN	8 OUT	TOT	9 IN	10 OUT	TOT
7:00- 7:15	255	475	730	17	45	62	239	147	386	459	253	712	21	58	79
:15- 7:30	272	490	762	20	49	69	246	137	383	467	196	663	27	61	88
:30- 7:45	326	552	878	21	55	76	310	144	454	483	211	694	38	96	134
:45- 8:00	423	776	1199	50	57	107	317	146	463	475	237	712	63	84	147
7- 8 AM	1276	2293	3569	108	206	314	1112	574	1686	1884	897	2781	149	299	448
8:00- 8:15	332	478	810	36	71	107	336	147	483	519	286	805	53	69	122
:15- 8:30	437	662	1099	44	63	107	290	137	427	475	266	741	60	81	141
:30- 8:45	297	548	845	51	40	91	229	159	388	565	284	849	60	95	155
:45- 9:00	447	534	981	46	42	88	281	149	430	507	278	785	47	118	165
8- 9 AM	1513	2222	3735	177	216	393	1136	592	1728	2066	1114	3180	220	363	583
9:00- 9:15	167	254	421	58	31	89	170	163	333	431	269	700	42	83	125
:15- 9:30	265	316	581	32	20	52	153	108	261	318	242	560	54	49	103
:30- 9:45	240	237	477	25	33	58	153	122	275	258	234	492	59	49	108
:45-10:00	453	323	776	28	26	54	126	122	248	299	220	519	44	63	107
9-10 AM	1125	1130	2255	143	110	253	602	515	1117	1306	965	2271	199	244	443
3:00- 3:15	451	271	722	57	27	84	154	215	369	255	331	586	110	65	175
:15- 3:30	501	375	876	55	26	81	189	211	400	272	299	571	92	72	164
:30- 3:45	498	288	786	64	30	94	180	239	419	288	357	645	98	74	172
:45- 4:00	700	455	1155	55	26	81	175	213	388	253	139	392	86	64	150
3- 4 PM	2150	1389	3539	231	109	340	698	878	1576	1068	1126	2194	386	275	661
4:00- 4:15	496	302	798	56	21	77	123	230	353	252	319	571	118	69	187
:15- 4:30	644	331	975	64	24	88	176	230	406	264	374	638	71	80	151
:30- 4:45	666	347	1013	68	31	99	161	271	432	286	579	865	103	73	176
:45- 5:00	829	408	1237	69	33	102	154	239	393	300	459	759	87	85	172
4- 5 PM	2635	1388	4023	257	109	366	614	970	1584	1102	1731	2833	379	307	686
5:00- 5:15	770	501	1271	74	30	104	169	237	406	438	636	1074	144	90	234
:15- 5:30	661	470	1131	75	43	118	201	255	456	351	604	955	102	88	190
:30- 5:45	418	223	641	64	36	100	183	276	459	356	500	856	92	91	183
:45- 6:00	670	479	1149	69	31	100	170	222	392	338	441	779	70	74	144
5- 6 PM	2519	1673	4192	282	140	422	723	990	1713	1483	2181	3664	408	343	751

MANUAL TURN MOVEMENT COUNT - 15 MINUTE SUMMARY

FOR: CENTRAL TRANSPORTATION PLANNING STAFF
BY: NORTHEAST TRAFFIC COUNTS
FILE: M-AC-CONC-C AD-61(179) (17csi) L:67 #296

LOCATION: CONCORD CIRCLE (ROUTE 2, 2A)
2 ROUTE 111, BARRETTS MILL RD., COMMONWEALTH AVE.
CONCORD, MASSACHUSETTS

DATE: TUESDAY, JUNE 5, 1990

KEY TO MOVEMENTS ON CIRCLE:
A = AT ROUTE 2 AND 2A
B = BETWEEN RTE 2 & BARRETS MILL RD.
C = AT BARRETS MILL ROAD
D = BETWEEN BAR. MILL RD. & RTE. 2A
E = AT RTE. 2A (ELM ST.)
F = BETWEEN RTE. 2A & LINCOLN TPKE.
G = AT LINCOLN TURNPIKE
H = BETWEEN LINC. TPKE. & COMM. AVE.
I = AT COMMONWEALTH AVE.
J = BETWEEN COMM. AVE. & RTE. 2

TOTAL TRAFFIC VOLUMES ON THE SEVERAL SEGMENTS OF THE CIRCLE

	A	B	C	D	E	F	G	H	I	J
7:00- 7:15	86	341	296	396	250	489	236	694	636	658
:15- 7:30	91	363	314	393	256	503	306	774	713	739
:30- 7:45	88	414	359	284	140	450	239	722	626	663
:45- 8:00	115	538	481	450	304	621	385	859	776	839
7- 8 AM	380	1656	1450	1523	950	2063	1166	3049	2751	2899
8:00- 8:15	92	424	354	428	281	617	331	850	781	834
:15- 8:30	78	515	452	419	282	572	306	781	700	760
:30- 8:45	74	371	331	470	312	541	257	822	726	786
:45- 9:00	95	542	500	431	282	563	285	792	674	721
8- 9 AM	339	1852	1637	1748	1157	2293	1179	3245	2881	3101
9:00- 9:15	45	212	181	481	318	489	220	650	568	610
:15- 9:30	63	328	308	335	227	380	138	456	407	461
:30- 9:45	73	313	280	358	236	389	155	414	364	423
:45-10:00	102	555	529	350	228	355	135	434	371	415
9-10 AM	283	1408	1298	1524	1009	1613	648	1954	1710	1909
3:00- 3:15	103	554	527	648	433	587	256	511	446	556
:15- 3:30	90	591	566	638	426	615	316	588	516	609
:30- 3:45	85	583	553	671	432	612	255	543	469	567
:45- 4:00	146	845	820	618	405	580	440	693	629	715
3- 4 PM	424	2573	2466	2575	1696	2394	1267	2335	2060	2447
4:00- 4:15	68	564	542	725	495	618	299	551	482	600
:15- 4:30	152	796	773	726	496	672	298	561	481	552
:30- 4:45	91	758	726	806	535	695	117	403	330	433
:45- 5:00	171	1001	968	818	579	733	274	574	490	576
4- 5 PM	482	3119	3009	3075	2105	2718	988	2089	1783	2161
5:00- 5:15	146	916	886	819	582	751	115	553	463	606
:15- 5:30	209	870	827	785	530	732	128	479	391	493
:30- 5:45	71	489	452	788	511	694	194	550	459	551
:45- 6:00	105	775	744	759	537	707	266	603	529	599
5- 6 PM	531	3050	2909	3151	2160	2884	703	2185	1842	2249

MANUAL TURN MOVEMENT COUNT - 15 MINUTE SUMMARY

FOR: CENTRAL TRANSPORTATION PLANNING STAFF
BY: NORTHEAST TRAFFIC COUNTS
FILE: M-AC-CONC-C AD-301(359) (17csi) L:67 #296

LOCATION: CONCORD CIRCLE (ROUTE 2, 2A)
2 ROUTE 111, BARRETTS MILL RD., COMMONWEALTH AVE.
CONCORD, MASSACHUSETTS

DATE: TUESDAY, JUNE 5, 1990

KEY TO MOVEMENTS:
5 = IN FROM ROUTE 2A (ELM ST)
8 = OUT TO RT 2 & 111 (LINC TPKE)
G = CIRCLE AT RT 2 & 211
H = BETWEEN LINC TPKE & COMM AVE
10 = OUT TO COMMONWEALTH AVE
I = CIRCLE AT COMMONWEALTH AVE
7 = IN FROM RT 2 &111 (LINC TPKE)
10 = OUT TO COMMONWEALTH AVE
I = CIRCLE AT COMMONWEALTH AVE

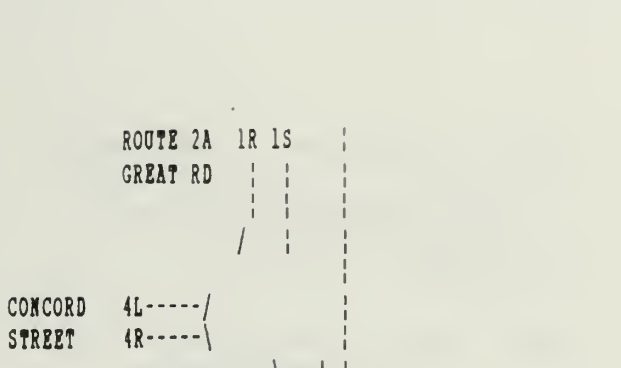
	FROM: 5		FROM: H		FROM : 7	
	TO: 8	G	TO: 10	I	TO: 10	I
7:00- 7:15	0	239	38	230	20	438
:15- 7:30	2	244	40	239	21	446
:30- 7:45	0	310	77	256	19	464
:45- 8:00	0	317	72	281	12	463
7- 8 AM	2	1110	227	1006	72	1811
8:00- 8:15	1	335	58	252	11	508
:15- 8:30	0	290	73	241	9	466
:30- 8:45	4	225	71	174	25	540
:45- 9:00	0	281	81	208	36	470
8- 9 AM	5	1131	283	875	81	1984
9:00- 9:15	0	170	68	144	15	416
:15- 9:30	3	150	42	124	8	311
:30- 9:45	2	151	33	121	16	242
:45-10:00	3	123	48	119	15	284
9-10 AM	8	594	191	508	54	1253
3:00- 3:15	3	151	48	129	17	238
:15- 3:30	8	181	49	128	23	250
:30- 3:45	1	179	54	118	20	268
:45- 4:00	1	174	53	99	12	241
3- 4 PM	13	685	204	474	72	997
4:00- 4:15	1	122	54	111	15	237
:15- 4:30	1	175	63	114	17	246
:30- 4:45	0	161	59	109	14	272
:45- 5:00	0	154	63	121	21	279
4- 5 PM	2	612	239	455	67	1034
5:00- 5:15	3	166	72	120	18	420
:15- 5:30	4	197	68	152	20	331
:30- 5:45	10	174	79	117	12	344
:45- 6:00	9	162	62	133	12	326
5- 6 PM	26	699	281	522	62	1421

MANUAL TURN MOVEMENT COUNT - 15 MINUTE SUMMARY

FOR: CENTRAL TRANSPORTATION PLANNING STAFF
BY: NORTHEAST TRAFFIC COUNTS
FILE: M-ACT-2A-3 AD-59 (17csi) L:68 #296

LOCATION: ROUTE 2A (GREAT ROAD)
3 AT CONCORD ROAD
ACTON, MASSACHUSETTS

DATE: TUESDAY, JUNE 5, 1990



* * * * * * * * *
* ALL VEHICLES *
* * * * * * * * *

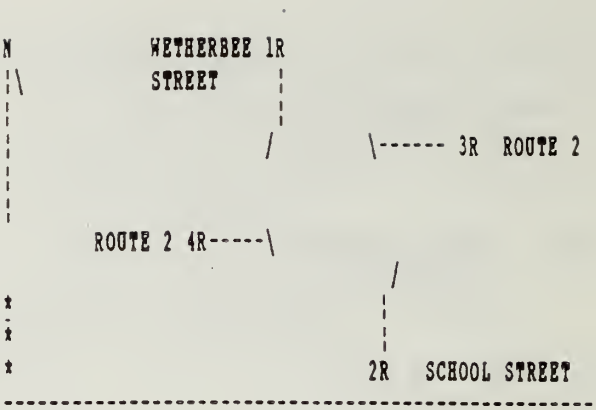
	/ 1R	1S	/\ TOT	\ 2L	2S	< TOT	-\ 4R	-/ 4L	> TOT
7:00- 7:15	2	163	165	8	60	68	33	3	36
:15- 7:30	3	200	203	11	89	100	53	6	59
:30- 7:45	1	253	254	13	123	136	73	4	77
:45- 8:00	8	252	260	13	130	143	120	9	129
7- 8 AM	14	868	882	45	402	447	279	22	301
8:00- 8:15	12	231	243	19	154	173	81	10	91
:15- 8:30	8	201	209	17	158	175	73	13	86
:30- 8:45	9	214	223	14	150	164	62	11	73
:45- 9:00	6	171	177	30	150	180	49	20	69
8- 9 AM	35	817	852	80	612	692	265	54	319
9:00- 9:15	8	149	157	10	150	160	33	13	46
:15- 9:30	3	132	135	16	115	131	35	11	46
:30- 9:45	16	129	145	13	122	135	29	6	35
:45-10:00	6	121	127	10	108	118	27	8	35
9-10 AM	33	531	564	49	495	544	124	38	162
3:00- 3:15	15	147	162	39	213	252	33	1	34
:15- 3:30	18	159	177	35	173	208	45	11	56
:30- 3:45	12	145	157	31	212	243	18	9	27
:45- 4:00	17	110	127	36	233	269	36	13	49
3- 4 PM	62	561	623	141	831	972	132	34	166
4:00- 4:15	14	122	136	33	219	252	34	10	44
:15- 4:30	13	131	144	40	214	254	23	5	28
:30- 4:45	10	138	148	32	207	239	25	8	33
:45- 5:00	5	151	156	56	199	255	29	4	33
4- 5 PM	42	542	584	161	839	1000	111	27	138
5:00- 5:15	15	190	205	58	197	255	30	8	38
:15- 5:30	12	169	181	60	206	266	32	9	41
:30- 5:45	16	141	157	55	220	275	36	12	48
:45- 6:00	15	137	152	46	193	239	27	5	32
5- 6 PM	58	637	695	219	816	1035	125	34	159

MANUAL TURN MOVEMENT COUNT - 15 MINUTE SUMMARY

FOR: CENTRAL TRANSPORTATION PLANNING STAFF
BY: NORTHEAST TRAFFIC COUNTS
FILE: M-ACT-RT2-4 AD-59 (17csi) L:68 #296

LOCATION: ROUTE 2 (RIGHT TURNS ONLY)
4 AT SCHOOL - WETHERBEE STREETS
ACTON, MASSACHUSETTS

DATE: TUESDAY, JUNE 5, 1990



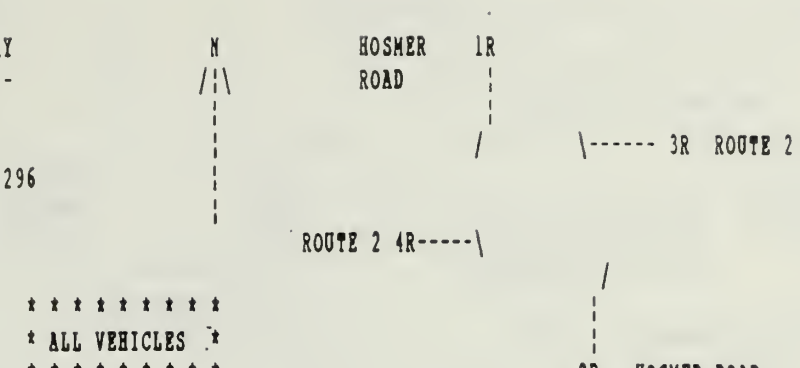
	1R	2R	3R	4R
7:00- 7:15	10	24	1	21
:15- 7:30	12	27	0	20
:30- 7:45	16	19	0	25
:45- 8:00	13	17	0	26
7- 8 AM	51	87	1	92
8:00- 8:15	11	15	1	18
:15- 8:30	10	11	0	17
:30- 8:45	10	10	0	15
:45- 9:00	12	16	1	16
8- 9 AM	43	52	2	66
9:00- 9:15	9	6	0	14
:15- 9:30	14	12	0	6
:30- 9:45	6	12	0	1
:45-10:00	8	9	1	4
9-10 AM	37	39	1	25
3:00- 3:15	12	13	0	8
:15- 3:30	8	9	0	9
:30- 3:45	14	23	1	16
:45- 4:00	8	9	0	3
3- 4 PM	42	54	1	36
4:00- 4:15	12	8	0	9
:15- 4:30	9	6	0	5
:30- 4:45	15	26	1	3
:45- 5:00	14	14	0	11
4- 5 PM	50	54	1	28
5:00- 5:15	6	31	0	18
:15- 5:30	6	27	0	26
:30- 5:45	11	19	0	15
:45- 6:00	11	16	3	27
5- 6 PM	34	93	3	86

MANUAL TURN MOVEMENT COUNT - 15 MINUTE SUMMARY

FOR: CENTRAL TRANSPORTATION PLANNING STAFF
BY: NORTHEAST TRAFFIC COUNTS
FILE: M-ACT-RT2-5 AD-59 (17csi) L:68 #296

LOCATION: ROUTE 2 (RIGHT TURNS ONLY)
5 AT HOSMER ROAD
ACTON, MASSACHUSETTS

DATE: TUESDAY, JUNE 5, 1990



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* ALL VEHICLES *
* * * * * * * * *

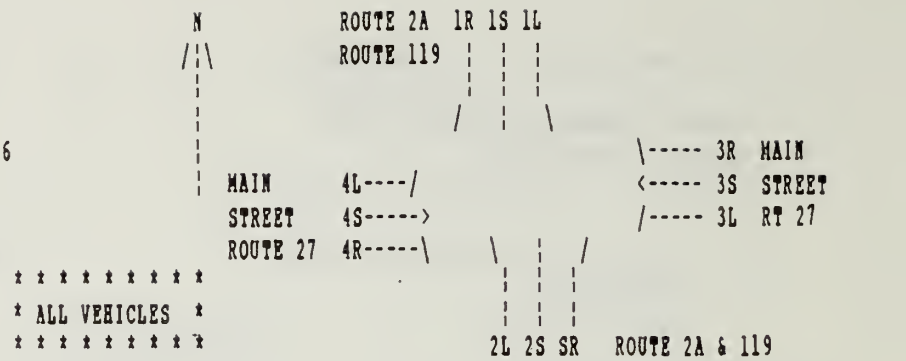
	1R	2R	3R	4R
7:00- 7:15	2	11	0	26
:15- 7:30	10	5	0	18
:30- 7:45	5	6	0	25
:45- 8:00	9	10	0	35
7- 8 AM	26	32	0	104
8:00- 8:15	17	8	2	17
:15- 8:30	18	3	1	13
:30- 8:45	16	9	3	15
:45- 9:00	19	6	2	12
8- 9 AM	70	26	8	57
9:00- 9:15	15	4	4	9
:15- 9:30	12	10	3	11
:30- 9:45	14	5	4	13
:45-10:00	11	6	5	10
9-10 AM	52	25	16	43
3:00- 3:15	17	2	4	9
:15- 3:30	11	5	1	11
:30- 3:45	10	11	3	11
:45- 4:00	5	8	2	12
3- 4 PM	43	26	10	43
4:00- 4:15	8	6	1	18
:15- 4:30	5	1	2	14
:30- 4:45	3	2	17	18
:45- 5:00	8	4	19	12
4- 5 PM	24	13	39	62
5:00- 5:15	4	13	20	20
:15- 5:30	4	3	21	9
:30- 5:45	8	4	51	18
:45- 6:00	6	3	11	12
5- 6 PM	22	23	103	59

MANUAL TURN MOVEMENT COUNT - 15 MINUTE SUMMARY

FOR: CENTRAL TRANSPORTATION PLANNING STAFF
BY: NORTHEAST TRAFFIC COUNTS
FILE: M-ACT-2A-6 AD-59 (17csi) L:67 #296

LOCATION: MAIN STREET (ROUTE 27)
6 AT CONCORD ROAD - NEWTOWN ROAD
ACTON, MASSACHUSETTS

DATE: THURSDAY, MAY 24, 1990



* * * * * * * * *
* ALL VEHICLES *
* * * * * * * * *

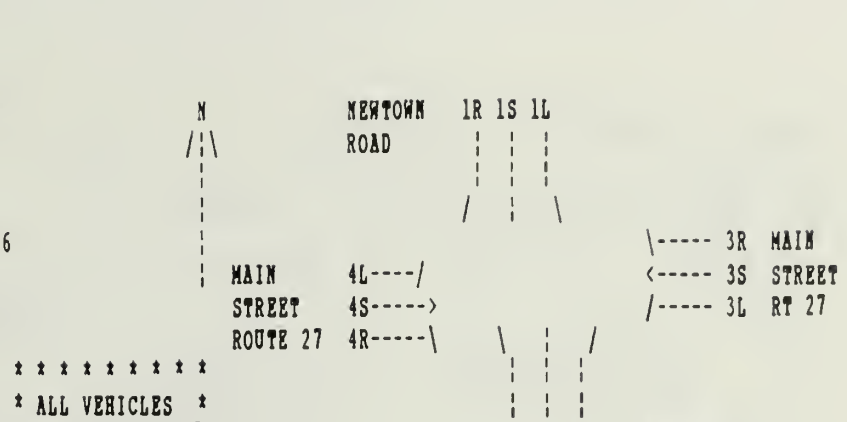
	/ 1R	¦ 1S	\ 1L	\/ TOT	\ 2L	¦ 2S	/ 2R	/\ TOT	\- 3R	< 3S	/- 3L	< TOT	-\ 4R	> 4S	-/ 4L	> TOT
7:00- 7:15	21	115	3	139	1	45	19	65	2	27	20	49	2	44	18	64
:15- 7:30	28	147	5	180	3	62	25	90	6	40	28	74	6	53	24	83
:30- 7:45	25	198	8	231	3	71	33	107	3	61	34	98	10	62	32	104
:45- 8:00	41	234	2	277	6	77	32	115	5	42	65	112	10	57	39	106
7- 8 AM	115	694	18	827	13	255	109	377	16	170	147	333	28	216	113	357
8:00- 8:15	56	192	6	254	9	99	29	137	8	41	41	90	8	68	595	671
:15- 8:30	30	150	3	183	4	107	36	147	5	51	51	107	11	59	69	139
:30- 8:45	35	119	4	158	9	120	25	154	4	34	54	92	6	42	58	106
:45- 9:00	50	137	11	198	6	96	24	126	4	31	24	59	20	54	50	124
8- 9 AM	171	598	24	793	28	422	114	564	21	157	170	348	45	223	772	1040
9:00- 9:15	28	88	13	129	1	77	30	108	6	39	33	78	11	35	41	87
:15- 9:30	41	109	2	152	10	90	16	116	4	25	23	52	11	44	45	100
:30- 9:45	27	60	4	91	9	68	23	100	5	39	15	59	14	31	38	83
:45-10:00	30	64	4	98	8	69	21	98	6	34	18	58	13	30	40	83
9-10 AM	126	321	23	470	28	304	90	422	21	137	89	247	49	140	164	353
3:00- 3:15	29	73	6	108	9	130	36	175	8	31	21	60	10	53	27	90
:15- 3:30	32	71	5	108	8	153	49	210	10	32	30	72	11	56	39	106
:30- 3:45	38	79	4	121	6	181	61	248	11	36	34	81	13	63	47	123
:45- 4:00	33	98	12	143	10	150	65	225	8	42	20	70	13	42	55	110
3- 4 PM	132	321	27	480	33	614	211	858	37	141	105	283	47	214	168	429
4:00- 4:15	41	120	11	172	13	174	54	241	13	55	28	96	14	47	43	104
:15- 4:30	61	88	9	158	17	154	63	234	4	34	28	66	18	69	45	132
:30- 4:45	60	110	9	179	20	193	48	261	8	60	42	110	10	47	53	110
:45- 5:00	39	122	3	164	15	181	50	246	15	53	26	94	15	44	56	115
4- 5 PM	201	440	32	673	65	702	215	982	40	202	124	366	57	207	197	461
5:00- 5:15	74	155	6	235	28	197	55	280	8	54	30	92	12	46	49	107
:15- 5:30	57	154	9	220	17	191	55	263	13	51	44	108	10	62	70	142
:30- 5:45	53	167	6	226	18	173	58	249	17	68	34	119	13	76	598	687
:45- 6:00	41	132	8	181	21	152	50	223	14	55	39	108	10	64	53	127
5- 6 PM	225	608	29	862	84	713	218	1015	52	228	147	427	45	248	770	1063

MANUAL TURN MOVEMENT COUNT - 15 MINUTE SUMMARY

FOR: CENTRAL TRANSPORTATION PLANNING STAFF
BY: NORTHEAST TRAFFIC COUNTS
FILE: M-ACT-MA-7 AD-59 (17csi) L:67 #296

LOCATION: MAIN STREET (ROUTE 27)
7 AT CONCORD ROAD - NEWTOWN ROAD
ACTON, MASSACHUSETTS

DATE: WEDNESDAY, MAY 23, 1990



* * * * * * * * *
* ALL VEHICLES *
* * * * * * * * *

	/ 1R	¦ 1S	\ 1L	\/ TOT	\ 2L	¦ 2S	/ 2R	/\ TOT	\- 3R	< 3S	/- 3L	< TOT	-\ 4R	> 4S	-/ 4L	> TOT
7:00- 7:15	11	18	4	33	14	2	0	16	4	87	2	93	16	75	4	95
:15- 7:30	17	10	6	33	18	1	0	19	2	144	2	148	26	12	5	43
:30- 7:45	17	20	4	41	9	0	0	9	0	101	2	103	48	133	2	183
:45- 8:00	17	19	6	42	11	2	0	13	2	103	1	106	44	158	4	206
7- 8 AM	62	67	20	149	52	5	0	57	8	435	7	450	134	378	15	527
8:00- 8:15	13	21	5	39	13	2	0	15	6	115	3	124	29	146	1	176
:15- 8:30	2	15	5	22	19	2	0	21	4	109	0	113	29	155	3	187
:30- 8:45	8	11	4	23	12	6	0	18	1	115	0	116	34	160	2	196
:45- 9:00	14	8	9	31	17	4	0	21	3	102	2	107	24	130	3	157
8- 9 AM	37	55	23	115	61	14	0	75	14	441	5	460	116	591	9	716
9:00- 9:15	16	9	9	34	16	6	0	22	4	99	1	104	39	149	12	200
:15- 9:30	11	12	5	28	23	3	0	26	2	101	1	104	18	131	6	155
:30- 9:45	3	10	4	17	17	5	0	22	2	78	4	84	20	130	6	156
:45-10:00	5	8	4	17	15	4	1	20	1	74	2	77	17	116	5	138
9-10 AM	35	39	22	96	71	18	1	90	9	352	8	369	94	526	29	649
3:00- 3:15	9	5	3	17	27	8	0	35	12	106	0	118	13	128	5	146
:15- 3:30	11	2	2	15	28	6	0	34	11	111	0	122	8	169	6	183
:30- 3:45	6	4	4	14	25	12	0	37	10	154	1	165	27	174	8	209
:45- 4:00	4	8	8	20	23	10	1	34	9	165	0	174	33	182	9	224
3- 4 PM	30	19	17	66	103	36	1	140	42	536	1	579	81	653	28	762
4:00- 4:15	5	6	3	14	19	14	0	33	11	153	0	164	34	128	5	167
:15- 4:30	11	4	4	19	31	9	0	40	15	201	2	218	23	148	8	179
:30- 4:45	4	3	5	12	27	10	0	37	13	181	1	195	32	151	12	195
:45- 5:00	15	9	4	28	28	9	0	37	9	216	0	225	34	152	9	195
4- 5 PM	35	22	16	73	105	42	0	147	48	751	3	802	123	579	34	736
5:00- 5:15	13	4	1	18	19	8	1	28	10	253	3	266	33	154	13	200
:15- 5:30	15	13	6	34	35	18	0	53	17	251	0	268	45	191	8	244
:30- 5:45*	3	0	2	5	25	2	1	28	6	100	0	106	19	77	9	105
:45- 6:00*	5	2	3	10	26	4	0	30	13	153	0	166	27	129	8	164
5- 6 PM	36	19	12	67	105	32	2	139	46	757	3	806	124	551	38	713

* 5:33 - accident in center of intersection - blocked 3R and backed up 2S until after 6:00 PM

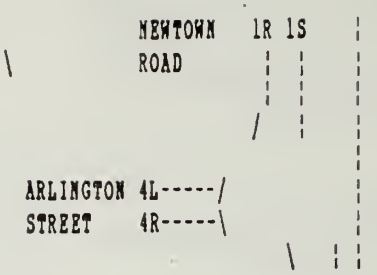
MANUAL TURN MOVEMENT COUNT - 15 MINUTE SUMMARY

FOR: CENTRAL TRANSPORTATION PLANNING STAFF
BY: NORTHEAST TRAFFIC COUNTS
FILE: M-ACT-NEW-8 AD-59 (17csi) L:68 #296

LOCATION: NEWTOWN ROAD
8 AT ARLINGTON STREET
ACTON, MASSACHUSETTS

DATE: WEDNESDAY, JUNE 6, 1990

* * * * * * * * * *
* ALL VEHICLES *
* * * * * * * * * *



	/ 1R	1S	/\ TOT	\ 2L	2S	< TOT	-\ 4R	-/ 4L	> TOT
7:00- 7:15	8	5	13	11	5	16	4	4	8
:15- 7:30	6	10	16	14	6	20	9	5	14
:30- 7:45	10	4	14	4	6	10	5	1	6
:45- 8:00	12	1	13	9	14	23	4	1	5
7- 8 AM	36	20	56	38	31	69	22	11	33
8:00- 8:15	12	8	20	10	16	26	9	2	11
:15- 8:30	5	4	9	16	8	24	9	3	12
:30- 8:45	11	1	12	5	5	10	5	3	8
:45- 9:00	6	5	11	6	4	10	8	2	10
8- 9 AM	34	18	52	37	33	70	31	10	41
9:00- 9:15	8	4	12	6	10	16	8	1	9
:15- 9:30	10	5	15	8	8	16	6	4	10
:30- 9:45	6	0	6	8	8	16	6	1	7
:45-10:00	9	3	12	4	5	9	8	4	12
9-10 AM	33	12	45	26	31	57	28	10	38
3:00- 3:15	5	1	6	2	5	7	5	4	9
:15- 3:30	8	2	10	3	6	9	4	3	7
:30- 3:45	6	2	8	2	13	15	6	5	11
:45- 4:00	11	1	12	3	9	12	12	4	16
3- 4 PM	30	6	36	10	33	43	27	16	43
4:00- 4:15	5	6	11	13	11	24	3	4	7
:15- 4:30	11	5	16	13	13	26	5	6	11
:30- 4:45	9	2	11	8	5	13	10	2	12
:45- 5:00	13	3	16	15	11	26	13	2	15
4- 5 PM	38	16	54	49	40	89	31	14	45
5:00- 5:15	6	2	8	11	8	19	13	4	17
:15- 5:30	8	4	12	12	6	18	15	9	24
:30- 5:45	14	1	15	16	11	27	17	9	26
:45- 6:00	15	2	17	15	8	23	18	8	26
5- 6 PM	43	9	52	54	33	87	63	30	93

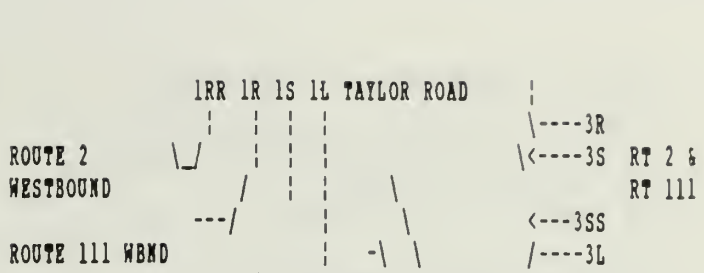
MANUAL TURN MOVEMENT COUNT - 15 MINUTE SUMMARY

FOR: CENTRAL TRANSPORTATION PLANNING STAFF
BY: NORTHEAST TRAFFIC COUNTS
FILE: M-ACT-2-9 AD-59 (17csi) L:68 #296

LOCATION: ROUTE 2 & ROUTE 111
9 AT TAYLOR - PIPER ROADS
ACTON, MASSACHUSETTS

* * * * * * * * * *
* ALL VEHICLES *
* * * * * * * * * *

DATE: THURSDAY, MAY 31, 1990



	_/ 1RR	_/ 1R	| 1S	_ 1L	\/ TOT	-\ 2LL	\ 2L	| 2S	/- 2R	/\ TOT	\- 3R	\< 3S	< 3SS	/ 3L	< TOT	| 4LL	/ 4L	| 4S	/- 4R	> TOT
7:00- 7:15	1	2	11	14	28	12	9	4	3	28	2	105	62	8	177	2	2	458	15	477
:15- 7:30	0	2	13	20	35	24	19	10	9	62	2	144	98	4	248	0	1	554	20	575
:30- 7:45	4	0	19	13	36	20	17	2	8	47	3	115	70	19	207	1	5	492	33	531
:45- 8:00	3	4	19	20	46	9	6	10	4	29	1	122	89	12	224	1	4	553	34	592
7- 8 AM	8	8	62	67	145	65	51	26	24	166	8	486	319	43	856	4	12	2057	102	2175
8:00- 8:15	6	4	18	14	42	18	24	13	6	61	6	196	60	33	295	8	2	453	40	503
:15- 8:30	6	5	17	12	40	17	12	11	6	46	2	220	79	6	307	0	3	559	43	605
:30- 8:45	9	6	8	17	40	15	10	16	9	50	9	219	77	15	320	0	5	447	25	477
:45- 9:00	2	9	11	11	33	12	17	15	3	47	5	168	46	19	238	1	8	421	15	445
8- 9 AM	23	24	54	54	155	62	63	55	24	204	22	803	262	73	1160	9	18	1880	123	2030
9:00- 9:15	3	10	15	12	40	8	11	20	2	41	2	183	74	16	275	11	6	298	10	325
:15- 9:30	5	11	14	8	38	27	5	12	10	54	3	182	81	15	281	0	17	285	14	316
:30- 9:45	2	9	9	4	24	8	6	5	3	22	5	200	84	17	306	17	2	280	9	308
:45-10:00	3	5	8	5	21	9	9	6	4	28	3	155	64	10	232	1	3	263	11	278
9-10 AM	13	35	46	29	123	52	31	43	19	145	13	720	303	58	1094	29	28	1126	44	1227
3:00- 3:15	4	11	4	3	22	11	16	12	3	42	11	265	90	14	380	2	2	207	5	216
:15- 3:30	8	4	6	4	22	12	13	8	9	42	2	268	92	9	371	2	5	291	10	308
:30- 3:45	2	14	11	2	29	53	35	15	4	107	3	288	138	12	441	4	6	213	9	232
:45- 4:00	6	5	10	3	24	29	12	18	2	61	10	381	213	3	607	5	4	281	16	306
3- 4 PM	20	34	31	12	97	105	76	53	18	252	26	1202	533	38	1799	13	17	992	40	1062
4:00- 4:15	3	13	11	4	31	30	25	17	10	82	2	405	132	2	541	3	5	228	8	244
:15- 4:30	4	3	18	6	31	19	13	15	9	56	1	440	141	4	586	4	8	274	6	292
:30- 4:45	5	15	18	5	43	38	39	16	8	101	6	506	130	9	651	6	4	300	14	324
:45- 5:00	8	4	16	11	39	21	33	28	19	101	1	485	105	11	602	1	13	259	5	278
4- 5 PM	20	35	63	26	144	108	110	76	46	340	10	1836	508	26	2380	14	30	1061	33	1138
5:00- 5:15	4	4	15	3	26	44	47	30	5	126	9	406	70	14	499	0	3	316	13	332
:15- 5:30	36	25	23	6	90	32	32	27	3	94	8	421	64	10	503	1	19	298	21	339
:30- 5:45	27	20	21	9	77	14	27	19	12	72	4	508	160	12	684	0	18	349	16	383
:45- 6:00	26	23	19	10	78	17	23	18	8	66	5	528	141	9	683	1	13	329	16	359
5- 6 PM	93	72	78	28	271	107	129	94	28	358	26	1863	435	45	2369	2	53	1292	66	1413

MANUAL TURN MOVEMENT COUNT - 15 MINUTE SUMMARY

FOR: CENTRAL TRANSPORTATION PLANNING STAFF
BY: NORTHEAST TRAFFIC COUNTS
FILE: M-ACT-MA-10 AD-59 (17csi) L:67 #296

LOCATION: MAIN STREET (ROUTE 27)
10 AT ROUTE 111 (MASSACHUSETTS AVENUE)
ACTON, MASSACHUSETTS

DATE: TUESDAY, JUNE 5, 1990

* * * * * * * * *
* ALL VEHICLES *
* * * * * * * * *

	/ 1R	| 1S	\ 1L	\/ TOT	\ 2L	| 2S	/ 2R	/\ TOT	\- 3R	< 3S	/- 3L	< TOT	-\ 4R	> 4S	-/ 4L	> TOT
7:00- 7:15	1	213	0	214	2	107	3	112	2	53	21	76	3	76	43	122
:15- 7:30	2	235	2	239	5	116	10	131	5	71	31	107	12	105	55	172
:30- 7:45	10	276	4	290	6	128	10	144	10	68	38	116	13	111	66	190
:45- 8:00	10	246	8	264	3	139	11	153	3	76	32	111	10	128	74	212
7- 8 AM	23	970	14	1007	16	490	34	540	20	268	122	410	38	420	238	696
8:00- 8:15	15	208	2	225	10	155	15	180	3	75	21	99	5	129	54	188
:15- 8:30	19	211	1	231	10	148	23	181	9	99	12	120	8	143	57	208
:30- 8:45	23	192	2	217	12	135	31	178	4	119	19	142	11	139	59	209
:45- 9:00	28	155	5	188	17	121	45	183	5	106	14	125	5	137	53	195
8- 9 AM	85	766	10	861	49	559	114	722	21	399	66	486	29	548	223	800
9:00- 9:15	31	105	1	137	17	122	47	186	11	81	17	109	9	107	54	170
:15- 9:30	27	75	0	102	20	109	35	164	8	74	11	93	4	84	45	133
:30- 9:45	21	63	2	86	21	106	25	152	14	58	17	89	12	61	50	123
:45-10:00	16	47	0	63	18	89	20	127	9	53	12	74	9	45	42	96
9-10 AM	95	290	3	388	76	426	127	629	42	266	57	365	34	297	191	522
3:00- 3:15	19	119	1	139	11	176	25	212	3	108	31	142	13	73	53	139
:15- 3:30	26	129	3	158	11	183	28	222	8	126	43	177	26	80	72	178
:30- 3:45	23	122	3	148	10	170	21	201	4	113	33	150	21	75	62	158
:45- 4:00	23	139	2	164	4	161	31	196	2	96	29	127	12	68	47	127
3- 4 PM	91	509	9	609	36	690	105	831	17	443	136	596	72	296	234	602
4:00- 4:15	29	138	4	171	8	164	24	196	4	85	32	121	12	58	35	105
:15- 4:30	31	171	4	206	6	190	32	228	6	99	41	146	11	87	53	151
:30- 4:45	35	196	5	236	6	206	26	238	5	108	61	174	14	117	56	187
:45- 5:00	44	224	3	271	3	224	27	254	8	128	56	192	13	145	48	206
4- 5 PM	139	729	16	884	23	784	109	916	23	420	190	633	50	407	192	649
5:00- 5:15	43	235	3	281	9	237	23	269	11	143	69	223	21	152	60	233
:15- 5:30	44	221	1	266	12	229	25	266	14	162	65	241	23	130	64	217
:30- 5:45	49	194	2	245	15	216	19	250	16	171	54	241	31	122	50	203
:45- 6:00	32	181	0	213	28	175	38	241	9	195	69	273	9	105	43	157
5- 6 PM	168	831	6	1005	64	857	105	1026	50	671	257	978	84	509	217	810

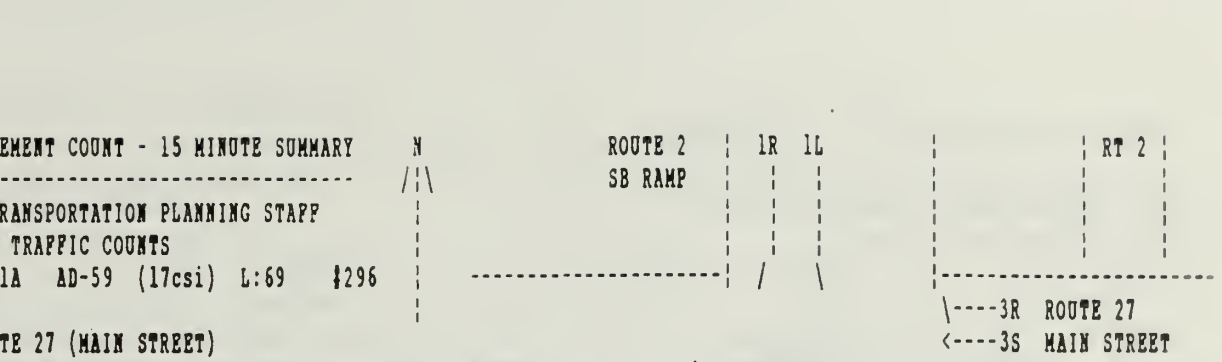
MANUAL TURN MOVEMENT COUNT - 15 MINUTE SUMMARY

FOR: CENTRAL TRANSPORTATION PLANNING STAFF
BY: NORTHEAST TRAFFIC COUNTS
FILE: M-ACT-M-11A AD-59 (17csi) L:69 #296

LOCATION: ROUTE 27 (MAIN STREET)
11-A AT ROUTE 2 - AT SB RAMPS ONLY
ACTON, MASSACHUSETTS

* * * * * * * * *
* ALL VEHICLES *
* * * * * * * * *

DATE: WEDNESDAY, MAY 30, 1990



	/ 1R	\ 1L	\/ TOT	\- 3R	< 3S	< TOT	-/ 4L	> 4S	> TOT
7:00- 7:15	89	23	112	13	88	101	4	162	166
:15- 7:30	162	30	192	25	93	118	11	177	188
:30- 7:45	171	85	256	16	118	134	5	205	210
:45- 8:00	185	23	208	9	87	96	0	244	244
7- 8 AM	607	161	768	63	386	449	20	788	808
8:00- 8:15	175	35	210	12	106	118	1	246	247
:15- 8:30	167	43	210	18	120	138	4	226	230
:30- 8:45	160	47	207	26	139	165	5	211	216
:45- 9:00	117	32	149	21	145	166	5	189	194
8- 9 AM	619	157	776	77	510	587	15	872	887
9:00- 9:15	90	30	120	14	133	147	12	193	205
:15- 9:30	71	23	94	10	150	160	6	177	183
:30- 9:45	76	21	97	4	135	139	3	170	173
:45-10:00	66	14	80	6	103	109	2	159	161
9-10 AM	303	88	391	34	521	555	23	699	722
3:00- 3:15	15	4	19	2	153	155	0	209	209
:15- 3:30	16	2	18	2	161	163	1	229	230
:30- 3:45	21	6	27	4	171	175	3	250	253
:45- 4:00	30	14	44	3	205	208	4	257	261
3- 4 PM	82	26	108	11	690	701	8	945	953
4:00- 4:15	35	19	54	2	229	231	8	261	269
:15- 4:30	44	23	67	2	210	212	2	268	270
:30- 4:45	43	11	54	1	214	215	2	278	280
:45- 5:00	50	17	67	11	180	191	1	296	297
4- 5 PM	172	70	242	16	833	849	13	1103	1116
5:00- 5:15	51	16	67	8	192	200	5	268	273
:15- 5:30	96	27	123	5	195	200	10	305	315
:30- 5:45	86	31	117	10	188	198	6	325	331
:45- 6:00	74	25	99	18	122	140	8	240	248
5- 6 PM	307	99	406	41	697	738	29	1138	1167

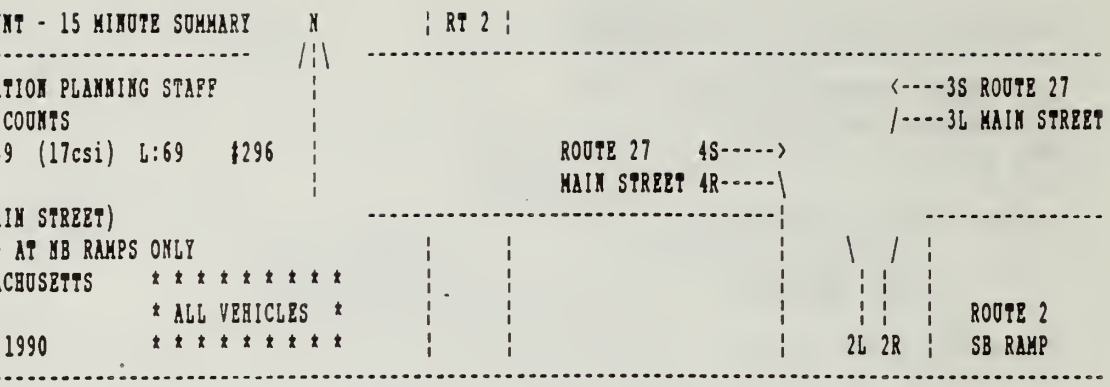
MANUAL TURN MOVEMENT COUNT - 15 MINUTE SUMMARY

FOR: CENTRAL TRANSPORTATION PLANNING STAFF
BY: NORTHEAST TRAFFIC COUNTS
FILE: M-ACT-M-11B AD-59 (17csi) L:69 #296

LOCATION: ROUTE 27 (MAIN STREET)
11-B AT ROUTE 2 - AT NB RAMPS ONLY
ACTON, MASSACHUSETTS

* * * * * * * * *
* ALL VEHICLES *
* * * * * * * * *

DATE: THURSDAY, MAY 31, 1990



	/ 2R	\ 2L	/\ TOT	/- 3L	< 3S	< TOT	-\ 4R	> 4S	> TOT
7:00- 7:15	12	6	18	6	95	101	54	125	179
:15- 7:30	10	1	11	8	96	104	79	116	195
:30- 7:45	13	3	16	15	118	133	85	141	226
:45- 8:00	14	4	18	14	98	112	63	175	238
7- 8 AM	49	14	63	43	407	450	281	557	838
8:00- 8:15	18	8	26	21	119	140	84	194	278
:15- 8:30	13	2	15	21	130	151	64	204	268
:30- 8:45	10	2	12	12	161	173	55	195	250
:45- 9:00	9	3	12	18	162	180	46	173	219
8- 9 AM	50	15	65	72	572	644	249	766	1015
9:00- 9:15	5	4	9	11	133	144	43	175	218
:15- 9:30	3	3	6	9	139	148	42	161	203
:30- 9:45	9	5	14	19	130	149	62	180	242
:45-10:00	3	2	5	12	115	127	31	151	182
9-10 AM	20	14	34	51	517	568	178	667	845
3:00- 3:15	3	8	11	23	130	153	75	131	206
:15- 3:30	6	6	12	38	144	182	85	140	225
:30- 3:45	6	10	16	36	147	183	96	152	248
:45- 4:00	16	9	25	49	180	229	108	163	271
3- 4 PM	31	33	64	146	601	747	364	586	950
4:00- 4:15	12	10	22	63	209	272	111	170	281
:15- 4:30	14	11	25	50	196	246	107	184	291
:30- 4:45	9	12	21	30	210	240	140	237	377
:45- 5:00	16	15	31	42	192	234	163	261	424
4- 5 PM	51	48	99	185	807	992	521	852	1373
5:00- 5:15	13	6	19	61	199	260	171	227	398
:15- 5:30	24	2	26	54	205	259	130	220	350
:30- 5:45	33	5	38	47	213	260	64	278	342
:45- 6:00	32	1	33	31	161	192	75	240	315
5- 6 PM	102	14	116	193	778	971	440	965	1405

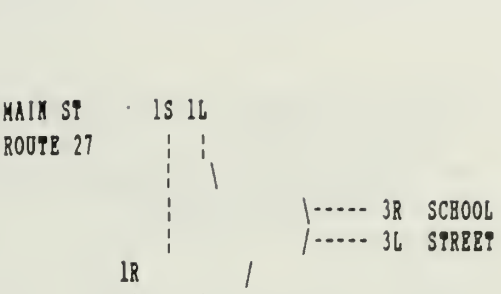
MANUAL TURN MOVEMENT COUNT - 15 MINUTE SUMMARY

FOR: CENTRAL TRANSPORTATION PLANNING STAFF
BY: NORTHEAST TRAFFIC COUNTS
FILE: M-ACT-MA-12 AD-59 (17csi) L:68 #296

LOCATION: MAIN STREET (ROUTE 27)
12 AT SCHOOL STREET AND AT MAPLE STREET
ACTON, MASSACHUSETTS

DATE: TUESDAY, JUNE 5, 1990

* * * * * * * * *
* ALL VEHICLES *
* * * * * * * * *



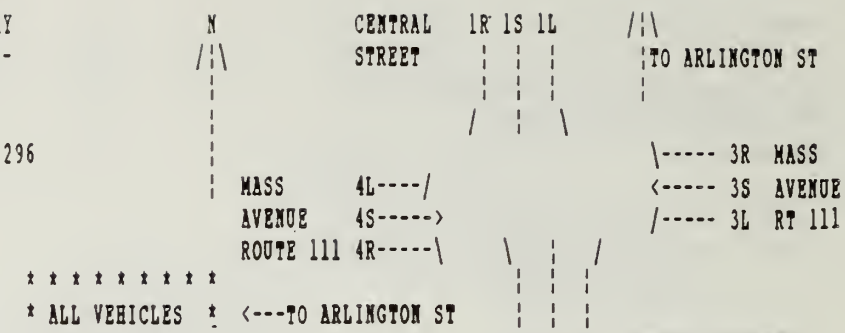
	1R	1S	1L	TOT	2L	2S	2R	TOT	3R	3L	TOT
7:00- 7:15	1	194	34	229	0	101	2	103	26	3	29
:15- 7:30	4	312	55	371	2	165	2	169	43	9	52
:30- 7:45	6	304	86	396	2	220	3	225	44	13	57
:45- 8:00	3	341	77	421	1	214	4	219	27	10	37
7- 8 AM	14	1151	252	1417	5	700	11	716	140	35	175
8:00- 8:15	3	331	70	404	1	212	5	218	23	9	32
:15- 8:30	2	329	61	392	0	190	3	193	26	3	29
:30- 8:45	6	289	42	337	0	152	3	155	25	10	35
:45- 9:00	11	255	24	290	2	134	1	137	21	15	36
8- 9 AM	22	1204	197	1423	3	688	12	703	95	37	132
9:00- 9:15	16	175	13	204	5	126	1	132	19	18	37
:15- 9:30	9	160	18	187	2	139	0	141	25	12	37
:30- 9:45	2	139	21	162	6	130	2	138	25	4	29
:45-10:00	6	119	25	150	9	135	2	146	31	6	37
9-10 AM	33	593	77	703	22	530	5	557	100	40	140
3:00- 3:15	11	160	31	202	1	149	4	154	35	3	38
:15- 3:30	20	184	38	242	3	162	5	170	44	5	49
:30- 3:45	12	177	32	221	2	192	11	205	32	11	43
:45- 4:00	15	171	42	228	9	241	10	260	42	13	55
3- 4 PM	58	692	143	893	15	744	30	789	153	32	185
4:00- 4:15	20	162	51	233	9	270	15	294	38	23	61
:15- 4:30	23	168	53	244	10	299	19	328	39	25	64
:30- 4:45	17	185	49	251	12	319	23	354	45	21	66
:45- 5:00	10	212	59	281	4	353	23	380	59	28	87
4- 5 PM	70	727	212	1009	35	1241	80	1356	181	97	278
5:00- 5:15	14	139	71	224	3	394	20	417	75	29	104
:15- 5:30	8	166	62	236	1	377	24	402	87	20	107
:30- 5:45	20	301	74	395	10	333	25	368	106	15	121
:45- 6:00	18	285	61	364	18	288	21	327	124	19	143
5- 6 PM	60	891	268	1219	32	1392	90	1514	392	83	475

MANUAL TURN MOVEMENT COUNT - 15 MINUTE SUMMARY

FOR: CENTRAL TRANSPORTATION PLANNING STAFF
BY: NORTHEAST TRAFFIC COUNTS
FILE: M-ACT-M-13A AD-59 (17csi) L:67 #296

LOCATION: ROUTE 111 (MASS AVENUE)
13-A AT CENTRAL STREET
ACTON, MASSACHUSETTS

DATE: TUESDAY, MAY 22, 1990



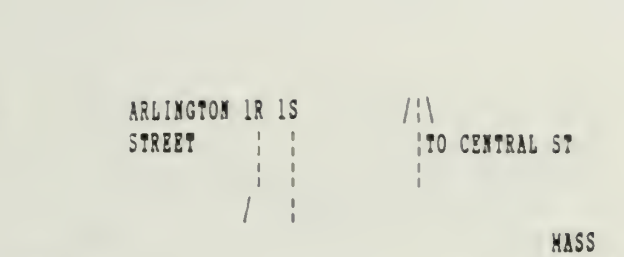
	1R	1S	1L	TOT	2L	2S	2R	TOT	3R	3S	3L	TOT	4R	4S	4L	TOT
7:00- 7:15	0	23	4	27	4	21	23	48	9	15	24	48	4	95	25	124
:15- 7:30	0	50	28	78	6	41	34	81	13	32	16	61	12	102	51	165
:30- 7:45	0	59	10	69	8	49	49	106	12	53	10	75	18	126	28	172
:45- 8:00	0	47	12	59	13	40	42	95	18	44	24	86	11	96	26	133
7- 8 AM	0	179	54	233	31	151	148	330	52	144	74	270	45	419	130	594
8:00- 8:15	0	63	12	75	5	33	26	64	10	55	11	76	25	108	32	165
:15- 8:30	0	46	16	62	9	48	45	102	6	53	18	77	18	96	20	134
:30- 8:45	0	26	15	41	2	34	33	69	15	60	13	88	5	80	21	106
:45- 9:00	0	30	14	44	9	35	31	75	13	46	24	83	11	117	20	148
8- 9 AM	0	165	57	222	25	150	135	310	44	214	66	324	59	401	93	553
9:00- 9:15	0	25	19	44	11	17	35	63	24	38	15	77	15	81	21	117
:15- 9:30	0	23	13	36	8	19	24	51	16	55	11	82	11	78	19	108
:30- 9:45	0	17	16	33	4	13	26	43	14	38	15	67	10	65	13	88
:45-10:00	0	18	15	33	5	14	24	43	13	39	12	64	10	61	19	90
9-10 AM	0	83	63	146	28	63	109	200	67	170	53	290	46	285	72	403
3:00- 3:15	0	35	11	46	5	24	16	45	14	66	24	104	17	57	13	87
:15- 3:30	0	18	12	30	11	30	19	60	21	53	11	85	18	42	25	85
:30- 3:45	0	34	17	51	5	33	18	56	18	54	16	88	11	61	20	92
:45- 4:00	0	26	11	37	10	32	21	63	19	88	23	130	16	84	18	118
3- 4 PM	0	113	51	164	31	119	74	224	72	261	74	407	62	244	76	382
4:00- 4:15	0	35	18	53	4	12	15	31	19	92	28	139	11	58	17	86
:15- 4:30	0	38	21	59	16	39	26	81	27	84	33	144	16	64	14	94
:30- 4:45	0	28	9	37	11	39	12	62	19	94	24	137	11	65	25	101
:45- 5:00	0	28	17	45	16	48	29	93	34	83	31	148	14	87	21	122
4- 5 PM	0	129	65	194	47	138	82	267	99	353	116	568	52	274	77	403
5:00- 5:15	0	40	6	46	6	58	33	97	29	119	41	189	13	100	28	141
:15- 5:30	0	47	15	62	2	69	18	89	45	100	43	188	17	111	30	158
:30- 5:45	0	46	20	66	20	59	20	99	23	114	49	186	14	96	21	131
:45- 6:00	0	45	16	61	13	57	18	88	23	94	42	159	15	88	20	123
5- 6 PM	0	178	57	235	41	243	89	373	120	427	175	722	59	395	99	553

MANUAL TURN MOVEMENT COUNT - 15 MINUTE SUMMARY

FOR: CENTRAL TRANSPORTATION PLANNING STAFF
BY: NORTHEAST TRAFFIC COUNTS
FILE: M-ACT-M-13B AD-59 (17csi) L:68 #296

LOCATION: ROUTE 111 (MASS AVENUE)
13-B AT ARLINGTON STREET
ACTON, MASSACHUSETTS

DATE: TUESDAY, MAY 22, 1990



* * * * * * * * * *
* ALL VEHICLES *
* * * * * * * * * *

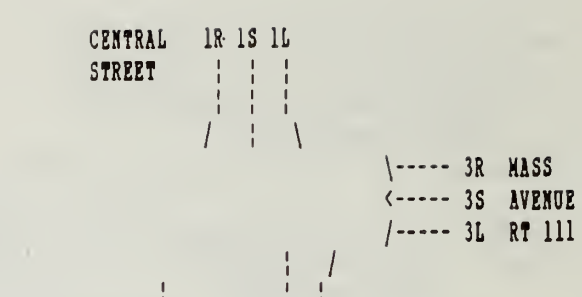
	/ 1R	| 1S	\/ TOT	\ 2L	/ 2R	/\ TOT	< 3S	/- 3L	< TOT	-\ 4R	> 4S	> TOT
7:00- 7:15	15	2	17	0	27	27	25	2	27	0	122	122
:15- 7:30	13	5	18	1	30	31	48	3	51	0	117	117
:30- 7:45	19	1	20	0	21	21	51	4	55	0	137	137
:45- 8:00	11	0	11	0	21	21	55	0	55	0	106	106
7- 8 AM	58	8	66	1	99	100	179	9	188	0	482	482
8:00- 8:15	21	2	23	0	33	33	63	2	65	0	130	130
:15- 8:30	18	5	23	1	21	22	62	1	63	1	111	112
:30- 8:45	24	4	28	0	19	19	51	2	53	0	100	100
:45- 9:00	12	5	17	0	26	26	47	5	52	0	122	122
8- 9 AM	75	16	91	1	99	100	223	10	233	1	463	464
9:00- 9:15	19	8	27	0	24	24	40	2	42	0	101	101
:15- 9:30	11	6	17	0	29	29	50	5	55	0	73	73
:30- 9:45	4	3	7	0	9	9	39	3	42	0	71	71
:45-10:00	8	5	13	0	16	16	33	4	37	0	66	66
9-10 AM	42	22	64	0	78	78	162	14	176	0	311	311
3:00- 3:15	23	3	26	1	15	16	66	2	68	0	54	54
:15- 3:30	16	6	22	0	11	11	60	2	62	0	86	86
:30- 3:45	26	10	36	1	10	11	58	11	69	0	94	94
:45- 4:00	28	5	33	0	18	18	85	11	96	0	92	92
3- 4 PM	93	24	117	2	54	56	269	26	295	0	326	326
4:00- 4:15	27	6	33	0	13	13	83	12	95	0	78	78
:15- 4:30	24	8	32	0	11	11	91	6	97	0	86	86
:30- 4:45	29	6	35	0	15	15	99	5	104	0	85	85
:45- 5:00	28	9	37	0	11	11	89	10	99	0	111	111
4- 5 PM	108	29	137	0	50	50	362	33	395	0	360	360
5:00- 5:15	46	12	58	0	13	13	111	12	123	1	130	131
:15- 5:30	48	13	61	0	13	13	94	15	109	0	128	128
:30- 5:45	26	11	37	0	13	13	119	14	133	0	122	122
:45- 6:00	29	10	39	0	11	11	103	11	114	0	116	116
5- 6 PM	149	46	195	0	50	50	427	52	479	1	496	497

MANUAL TURN MOVEMENT COUNT - 15 MINUTE SUMMARY

FOR: CENTRAL TRANSPORTATION PLANNING STAFF
BY: NORTHEAST TRAFFIC COUNTS
FILE: M-ACT-M-13C AD-59 (17csi) L:68 #296

LOCATION: CENTRAL STREET
13-C AT ARLINGTON STREET
ACTON, MASSACHUSETTS

DATE: TUESDAY, MAY 22, 1990

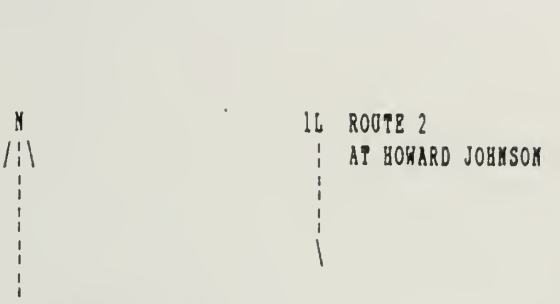


	/ 1R	| 1S	\ 1L	\/ TOT	| 2S	/ 2R	/\ TOT	\- 3R	< 3S	/- 3L	< TOT
7:00- 7:15	0	44	4	48	35	32	67	2	16	4	22
:15- 7:30	2	90	5	97	46	49	95	4	17	5	26
:30- 7:45	10	83	11	104	54	41	95	4	23	2	29
:45- 8:00	4	56	4	64	60	27	87	2	8	5	15
7- 8 AM	16	273	24	313	195	149	344	12	64	16	92
8:00- 8:15	5	81	5	91	47	31	78	2	17	9	28
:15- 8:30	3	71	6	80	49	25	74	4	25	5	34
:30- 8:45	10	51	4	65	61	17	78	5	19	2	26
:45- 9:00	5	41	8	54	48	26	74	4	9	3	16
8- 9 AM	23	244	23	290	205	99	304	15	70	19	104
9:00- 9:15	4	62	2	68	45	31	76	0	20	4	24
:15- 9:30	2	35	8	45	28	21	49	6	18	11	35
:30- 9:45	4	36	13	53	24	15	39	4	4	4	12
:45-10:00	3	38	9	50	21	17	38	4	11	5	20
9-10 AM	13	171	32	216	118	84	202	14	53	24	91
3:00- 3:15	15	36	8	59	36	29	65	9	32	4	45
:15- 3:30	10	34	2	46	48	21	69	9	12	6	27
:30- 3:45	9	49	4	62	49	24	73	2	26	11	39
:45- 4:00	5	29	8	42	53	21	74	6	27	8	41
3- 4 PM	39	148	22	209	186	95	281	26	97	29	152
4:00- 4:15	11	47	2	60	27	14	41	0	32	3	35
:15- 4:30	5	51	10	66	59	21	80	12	31	18	61
:30- 4:45	9	32	9	50	44	24	68	11	25	6	42
:45- 5:00	8	39	5	52	81	29	110	12	30	9	51
4- 5 PM	33	169	26	228	211	88	299	35	118	36	189
5:00- 5:15	11	51	2	64	105	24	129	9	39	16	64
:15- 5:30	9	26	13	48	109	36	145	9	63	20	92
:30- 5:45	5	76	11	92	72	32	104	12	32	3	47
:45- 6:00	4	63	9	76	66	29	95	11	39	12	62
5- 6 PM	29	216	35	280	352	121	473	41	173	51	265

FOR: CENTRAL TRANSPORTATION PLANNING STAFF
BY: NORTHEAST TRAFFIC COUNTS
FILE: M-ACT-R2-14 AD-59 (17csi) L:69 #296

LOCATION: ROUTE 2 (AT HOWARD JOHNSON)
14 AT INDUSTRIAL PARK DRIVE
ACTON, MASSACHUSETTS

DATE: TUESDAY, JUNE 5, 1990



* * * * * * * * *
* ALL VEHICLES *
* * * * * * * * *

	1L	4L	4S	4R	TOT
7:00- 7:15	131	12	4	2	18
:15- 7:30	149	10	4	0	14
:30- 7:45	172	11	9	0	20
:45- 8:00	157	22	4	2	28
7- 8 AM	609	55	21	4	80
8:00- 8:15	184	14	8	2	24
:15- 8:30	146	21	5	0	26
:30- 8:45	142	14	11	2	27
:45- 9:00	145	23	4	6	33
8- 9 AM	617	72	28	10	110
9:00- 9:15	107	14	11	2	27
:15- 9:30	92	12	2	5	19
:30- 9:45	68	12	8	6	26
:45-10:00	84	11	6	5	22
9-10 AM	351	49	27	18	94
3:00- 3:15	76	47	9	6	62
:15- 3:30	84	44	10	5	59
:30- 3:45	78	74	14	9	97
:45- 4:00	64	47	6	6	59
3- 4 PM	302	212	39	26	277
4:00- 4:15	86	90	12	3	105
:15- 4:30	67	40	12	5	57
:30- 4:45	57	81	7	15	103
:45- 5:00	85	84	20	11	115
4- 5 PM	295	295	51	34	380
5:00- 5:15	61	87	28	12	127
:15- 5:30	84	95	22	28	145
:30- 5:45	64	55	17	10	82
:45- 6:00	71	46	18	6	70
5- 6 PM	280	283	85	56	424

1988-1990 Counts
Done for the MDPW Route 128 Study

LOCATION NUMBER = 53 COMMUNITY = LINCOLN
STREET NAME APPROACH #1= GREAT ROAD (2A) DATE COUNTED = 12/15/88
STREET NAME APPROACH #2= VIRGINIA ROAD
STREET NAME APPROACH #3= GREAT ROAD (2A)
STREET NAME APPRDACH #4= BEDFORD ROAD

CUMULATIVE VOLUME FIGURES

PERIOD	R1	S1	L1	TRR1	TRS1	TRL1	R2	S2	L2	TRR2	TRS2	TRL2	R3	S3	L3	TRR3	TRS3	TRL3	R4	S4	L4	TRR4	TRS4	TRL4
6:30-6:45	3	120	0	0	6	0	0	0	0	0	0	0	0	59	4	0	8	0	10	0	0	0	0	0
6:45-7:00	13	322	0	0	22	0	0	0	0	0	0	0	0	123	7	0	11	0	40	0	0	1	0	0
7:00-7:15	39	566	1	0	38	0	0	0	0	0	0	0	0	188	9	0	14	0	73	0	0	4	0	0
7:15-7:30	66	856	1	2	56	0	0	0	0	0	0	0	0	271	26	0	21	0	139	0	5	9	0	1
7:30-7:45	90	1147	1	3	73	0	0	0	0	0	0	0	0	394	39	0	30	2	229	0	9	12	0	2
7:45-8:00	115	1451	1	4	80	0	0	0	0	0	0	0	0	524	65	0	39	2	323	0	12	17	0	3
8:00-8:15	144	1764	1	8	92	0	0	0	0	0	0	0	1	665	88	0	42	2	439	2	16	19	1	4
8:15-8:30	170	2018	3	9	107	1	0	1	0	0	1	0	1	775	111	0	54	5	541	2	17	20	1	4
8:30-8:45	194	2259	3	10	127	1	0	1	0	0	1	0	1	909	125	0	68	6	602	3	19	26	1	4
8:45-9:00	210	2500	3	11	137	1	0	1	1	0	1	0	1	1027	134	0	82	8	656	3	21	30	1	4
9:00-9:15	218	2727	3	11	151	1	0	1	2	0	1	0	1	1118	141	0	90	8	688	3	22	30	1	4
9:15-9:30	231	2927	3	13	170	1	0	2	4	0	1	1	4	1195	149	0	99	11	718	3	27	33	1	4
9:30-9:45	235	3080	3	13	182	1	0	2	4	0	1	1	4	1289	159	0	109	12	745	3	31	36	1	4

ACTUAL TIME PERIOD VOLUME FIGURE

PERIOD	R1	S1	L1	TRR1	TRS1	TRL1	R2	S2	L2	TRR2	TRS2	TRL2	R3	S3	L3	TRR3	TRS3	TRL3	R4	S4	L4	TRR4	TRS4	TRL4
6:30-6:45	3	120	0	0	6	0	0	0	0	0	0	0	0	59	4	0	8	0	10	0	0	0	0	0
6:45-7:00	10	202	0	0	16	0	0	0	0	0	0	0	0	64	3	0	3	0	30	0	0	1	0	0
7:00-7:15	26	244	1	0	16	0	0	0	0	0	0	0	0	65	2	0	3	0	33	0	0	3	0	0
7:15-7:30	27	290	0	2	18	0	0	0	0	0	0	0	0	83	17	0	7	0	66	0	5	5	0	1
7:30-7:45	24	742	0	1	17	0	0	0	0	0	0	0	0	123	13	0	9	2	90	0	4	3	0	1
7:45-8:00	25	1337	0	1	7	0	0	0	0	0	0	0	0	130	26	0	9	0	94	0	3	5	0	1
8:00-8:15	29	313	0	4	12	0	0	0	0	0	0	0	1	141	23	0	3	0	116	2	4	2	1	1
8:15-8:30	26	254	2	1	15	1	0	1	0	0	1	0	0	110	23	0	12	3	102	0	1	1	0	0
8:30-8:45	24	241	0	1	20	0	0	0	0	0	0	0	0	134	14	0	14	1	61	1	2	6	0	0
8:45-9:00	16	241	0	1	10	0	0	0	1	0	0	0	0	118	9	0	14	2	54	0	2	4	0	0
9:00-9:15	8	227	0	0	14	0	0	0	1	0	0	0	0	91	7	0	8	0	32	0	1	0	0	0
9:15-9:30	13	200	0	2	19	0	0	1	2	0	0	1	3	77	8	0	9	3	30	0	5	3	0	0
9:30-9:45	4	153	0	0	12	0	0	0	0	0	0	0	0	94	10	0	10	1	27	0	4	3	0	0
TOTAL	235	3080	3	13	182	1	0	2	4	0	1	1	4	1289	159	0	109	12	745	3	31	36	1	4

LOCATION NUMBER = 53 COMMUNITY = LINCOLN

STREET NAME APPROACH #1= GREAT ROAD (2A) DATE COUNTED = 12/15/88

STREET NAME APPROACH #2= VIRGINIA ROAD

STREET NAME APPROACH #3= GREAT ROAD (2A)

STREET NAME APPROACH #4= BEDFORD ROAD

CUMULATIVE VOLUME FIGURES

PERIOD	R1	S1	L1	TRR1	TRS1	TRL1	R2	S2	L2	TRR2	TRS2	TRL2	R3	S3	L3	TRR3	TRS3	TRL3	R4	S4	L4	TRR4	TRS4	TRL4
2:30-2:45	4	122	0	0	12		0	0	0	0	0	0	1	176	19	0	22	2	18	0	4	4	0	0
2:45-3:00	11	234	0	0	17		0	0	1	0	0	0	2	331	49	0	35	4	41	4	14	6	1	2
3:00-3:15	20	391	0	1	40		0	0	2	0	0	0	3	514	84	0	47	5	59	6	18	7	1	4
3:15-3:30	23	516	0	1	56		1	0	2	0	0	0	6	652	100	1	57	7	92	6	21	11	1	4
3:30-3:45	29	640	0	1	69		1	0	2	0	0	0	6	829	136	1	68	7	110	7	25	12	1	4
3:45-4:00	34	768	0	1	85		1	0	2	0	0	0	6	1035	160	1	81	7	132	8	35	13	1	5
4:00-4:15	43	901	0	1	92		1	0	2	0	0	0	6	1237	190	1	88	12	149	9	43	16	1	6
4:15-4:30	50	1041	0	2	99		1	0	2	0	0	0	6	1512	223	1	99	12	160	11	55	16	1	8
4:30-4:45	62	1194	0	2	109		1	0	2	0	0	0	6	1707	258	1	107	12	174	11	59	16	1	8
4:45-5:00	75	1295	0	4	112		1	0	2	0	0	0	7	1957	304	1	111	13	188	11	72	17	1	8
5:00-5:15	82	1448	0	4	117		1	0	3	0	0	0	7	2280	341	1	114	14	198	11	79	17	1	8
5:15-5:30	94	1572	0	4	122		1	0	3	0	0	0	7	2572	379	1	121	14	222	14	93	17	1	10
5:30-5:45	100	1616	0	4	123		1	0	3	0	0	0	7	2872	421	1	131	15	235	15	107	17	1	11
5:45-6:00	106	1838	0	4	128		1	1	3	0	0	0	8	3061	452	1	134	15	256	16	115	17	1	12
6:00-6:15	112	1964	0	4	129		1	1	4	0	0	0	9	3269	483	1	138	16	264	16	125	17	1	12
6:15-6:30	116	2074	0	4	131		1	1	4	0	0	0	9	3473	501	1	139	16	269	17	131	17	1	13

ACTUAL TIME PERIOD VOLUME FIGURE

PERIOD	R1	S1	L1	TRR1	TRS1	TRL1	R2	S2	L2	TRR2	TRS2	TRL2	R3	S3	L3	TRR3	TRS3	TRL3	R4	S4	L4	TRR4	TRS4	TRL4
2:30-2:45	4	122	0	0	12	0	0	0	0	0	0	0	1	176	19	0	22	2	18	0	14	4	0	0
2:45-3:00	7	112	0	0	5	0	0	0	1	0	0	0	1	155	30	0	13	2	23	4	4	2	1	2
3:00-3:15	9	157	0	1	23	0	0	0	1	0	0	0	1	183	35	0	12	1	18	2	3	1	0	2
3:15-3:30	3	125	0	0	16	0	1	0	0	0	0	0	3	138	16	1	10	2	33	0	4	4	0	0
3:30-3:45	6	124	0	0	13	0	0	0	0	0	0	0	0	177	36	0	11	0	18	1	10	1	0	0
3:45-4:00	5	128	0	0	16	0	0	0	0	0	0	0	0	206	24	0	13	0	22	1	8	1	0	1
4:00-4:15	9	133	0	0	7	0	0	0	0	0	0	0	0	202	30	0	7	5	17	1	12	3	0	1
4:15-4:30	7	140	0	1	7	0	0	0	0	0	0	0	0	275	33	0	11	0	11	2	4	0	0	2
4:30-4:45	12	153	0	0	10	0	0	0	0	0	0	0	0	195	35	0	8	0	14	0	13	0	0	0
4:45-5:00	13	101	0	2	3	0	0	0	0	0	0	0	1	250	46	0	4	1	14	0	7	1	0	0
5:00-5:15	7	153	0	0	5	0	0	0	1	0	0	0	0	323	37	0	3	1	10	0	14	0	0	0
5:15-5:30	12	124	0	0	5	0	0	0	0	0	0	0	0	292	38	0	7	0	24	3	14	0	0	2
5:30-5:45	6	44	0	0	1	0	0	0	0	0	0	0	0	300	42	0	10	1	13	1	8	0	0	1
5:45-6:00	6	222	0	0	5	0	0	1	0	0	0	0	1	189	31	0	3	0	21	1	10	0	0	1
6:00-6:15	6	126	0	0	1	0	0	0	1	0	0	0	1	208	31	0	4	1	8	0	6	0	0	0
6:15-6:30	4	110	0	0	2	0	0	0	0	0	0	0	0	204	18	0	1	0	5	1	ERR	0	0	1
TOTAL	116	2074	0	4	131	0	1	1	4	0	0	0	9	3473	501	1	139	16	269	17	ERR	17	1	13

0

Rte.128 North Suburban Planning Study

Site Code : 06129052
N-S Street: Hanscom Drive
E-W Street: Great Rd (Rte. 2A)
Weather : Sunny

PAGE: 1
FILE: ro-52

Sum of the Primary and Secondary

DATE: 6/12/90

Time Begin	From ~~North~~ East RT	THRU	LT	From East RT	THRU	LT	From ~~South~~ West RT	THRU	LT	From ~~West~~ North RT	THRU	LT	Vehicle Total
6:45	99	50	0	0	0	0	0	139	50	5	0	2	345
7:00 AM	162	68	0	0	0	0	0	163	70	10	0	11	484
7:15	179	112	0	0	0	0	0	208	77	17	0	14	607
7:30	90	95	0	0	0	0	0	291	76	25	0	27	604
7:45	90	128	0	0	0	0	0	305	74	24	0	12	633
HR TOTAL	521	403	0	0	0	0	0	967	297	76	0	64	2328
8:00 AM	79	115	0	0	0	0	0	277	66	15	0	20	572
8:15	54	125	0	0	0	0	0	275	51	15	0	18	538
8:30	49	125	0	0	0	0	0	272	55	21	0	20	542
8:45	62	106	0	0	0	0	0	228	38	20	0	22	476
HR TOTAL	244	471	0	0	0	0	0	1052	210	71	0	80	2128
9:00 AM	59	112	0	0	0	0	0	174	34	9	0	24	412
9:15	39	76	0	0	0	0	0	176	31	16	0	19	357
9:30	44	72	0	0	0	0	0	127	23	11	0	21	298
DAY TOTAL	1006	1184	0	0	0	0	0	2635	645	188	0	210	5868

PEAK PERIOD ANALYSIS FOR THE PERIOD: 6:45 AM - 09:45 AM

DIRECTION FROM	START PEAK HOUR	PEAK HR FACTOR	..... VOLUMES ..... Right	Thru	Left	Total	.... PERCENTS ... Right	Thru	Left
North	7:00 AM	0.79	521	403	0	924	56	44	0
East	7:00 AM	0.00	0	0	0	0	0	0	0
South	7:30 AM	0.93	0	1148	267	1415	0	81	19
West	7:30 AM	0.75	79	0	77	156	51	0	49
Entire Intersection									
North	7:15 AM	0.76	438	450	0	888	49	51	0
East		0.00	0	0	0	0	0	0	0
South		0.91	0	1081	293	1374	0	79	21
West		0.74	81	0	73	154	53	0	47

Rte.128 North Suburban Planning Study

Site Code : 06129052
N-S Street: Hanscom Drive
E-W Street: Great Rd (Rte. 2A)
Weather : Sunny

PAGE: 1
FILE: rd-52

Sum of the Primary and Secondary

DATE: 6/12/90

Time Begin	From ~~North~~ East RT	THRU	LT	From ~~East~~ RT	THRU	LT	From ~~South~~ West RT	THRU	LT	From ~~West~~ North RT	THRU	LT	Vehicle Total
11:00 AM	38	69	0	0	0	0	0	84	23	22	0	36	272
11:15	36	116	0	0	0	0	0	92	20	22	0	46	332
11:30	32	98	0	0	0	0	0	101	20	36	0	47	334
11:45	50	121	0	0	0	0	0	108	28	19	0	37	363
HR TOTAL	156	404	0	0	0	0	0	385	91	99	0	166	1301
12:00 PM	44	109	0	0	0	0	0	104	18	29	0	50	354
12:15	43	115	0	0	0	0	0	102	20	21	0	36	337
12:30	41	104	0	0	0	0	0	95	25	23	0	45	333
12:45	61	104	0	0	0	0	0	110	23	17	0	40	355
HR TOTAL	189	432	0	0	0	0	0	411	86	90	0	171	1379
1:00 PM	37	115	0	0	0	0	0	103	32	17	0	41	345
1:15	41	96	0	0	0	0	0	106	25	16	0	34	318
1:30	0	0	0	0	0	0	0	0	0	0	0	0	0
DAY TOTAL	423	1047	0	0	0	0	0	1005	234	222	0	412	3343

PEAK PERIOD ANALYSIS FOR THE PERIOD: 11:00 AM - 01:45 PM

DIRECTION FROM	START PEAK HOUR	PEAK HR FACTOR	..... VOLUMES ..... Right	Thru	Left	Total	.... PERCENTS ... Right	Thru	Left
North	11:45 AM	0.92	178	449	0	627	28	72	0
East	11:45 AM	0.00	0	0	0	0	0	0	0
South	12:30 PM	0.96	0	414	105	519	0	80	20
West	11:15 AM	0.86	106	0	180	286	37	0	63
Entire Intersection									
North	11:30 AM	0.89	169	443	0	612	28	72	0
East		0.00	0	0	0	0	0	0	0
South		0.92	0	415	86	501	0	83	17
West		0.83	105	0	170	275	38	0	62

Rte.128 North Suburban Planning Study

Site Code : 06129052
N-S Street: Hanscom Drive
E-W Street: Great Rd (Rte. 2A)
Weather : Sunny

PAGE: 1
FILE: ro-52

Sum of the Primary and Secondary

DATE: 6/12/90

Time Begin	From ~~North~~ East RT	THRU	LT	From East RT	THRU	LT	From ~~South~~ West RT	THRU	LT	From ~~West~~ South RT	THRU	LT	Vehicle Total
3:00 PM	37	172	0	0	0	0	0	98	15	70	0	179	571
3:15	34	145	0	0	0	0	0	101	19	33	0	80	412
3:30	35	194	0	0	0	0	0	115	19	47	0	66	476
3:45	25	176	0	0	0	0	0	122	18	48	0	63	452
HR TOTAL	131	687	0	0	0	0	0	436	71	198	0	388	1911
4:00 PM	32	214	0	0	0	0	0	116	13	76	0	95	546
4:15	30	246	0	0	0	0	0	118	20	61	0	70	545
4:30	39	213	0	0	0	0	0	114	18	80	0	89	553
4:45	27	280	0	0	0	0	0	133	29	65	0	59	593
HR TOTAL	128	953	0	0	0	0	0	481	80	282	0	313	2237
5:00 PM	31	302	0	0	0	0	0	121	20	76	0	72	622
5:15	37	295	0	0	0	0	0	133	30	70	0	57	622
5:30	33	265	0	0	0	0	0	115	30	57	0	44	544
5:45	47	273	0	0	0	0	0	120	24	38	0	55	557
HR TOTAL	148	1135	0	0	0	0	0	489	104	241	0	228	2345
6:00 PM	35	231	0	0	0	0	0	112	17	34	0	41	470
6:15	22	168	0	0	0	0	0	78	8	13	0	30	319
DAY TOTAL	464	3174	0	0	0	0	0	1596	280	768	0	1000	7282

PEAK PERIOD ANALYSIS FOR THE PERIOD: 03:00 PM - 06:30 PM

DIRECTION FROM	START PEAK HOUR	PEAK HR FACTOR	..... VOLUMES ..... Right	Thru	Left	Total	.... PERCENTS ... Right	Thru	Left
North	5:00 PM	0.96	148	1135	0	1283	12	88	0
East	5:00 PM	0.00	0	0	0	0	0	0	0
South	4:45 PM	0.94	0	502	109	611	0	82	18
West	4:00 PM	0.87	282	0	313	595	47	0	53
Entire Intersection									
North	4:30 PM	0.92	134	1090	0	1224	11	89	0
East		0.00	0	0	0	0	0	0	0
South		0.92	0	501	97	598	0	84	16
West		0.84	291	0	277	568	51	0	49

LOCATION NUMBER = 52 COMMUNITY = LINCOLN
STREET NAME APPROACH #1= GREAT ROAD (RTE 2A) DATE COUNTED = 12/13/88
STREET NAME APPROACH #2=
STREET NAME APPROACH #3= GREAT ROAD (RTE 2A)
STREET NAME APPROACH #4= HANSCOM DRIVE

CUMULATIVE VOLUME FIGURES

PERIOD	R1	S1	L1	TRR1	TRS1	TRL1	R2	S2	L2	TRR2	TRS2	TRL2	R3	S3	L3	TRR3	TRS3	TRL3	R4	S4	L4	TRR4	TRS4	TRL4
6:30-6:45	18	13		0	1									0	0		0	0	0		0	0		0
6:45-7:00	93	60		0	2									141	43		9	6	7		1	2		0
7:00-7:15	215	115		1	5									322	112		18	12	18		7	4		0
7:15-7:30	322	191		2	12									586	197		33	18	25		13	6		0
7:30-7:45	412	289		3	18									801	270		47	20	37		28	9		2
7:45-8:00	482	411		6	25									1083	360		59	24	53		42	10		2
8:00-8:15	569	557		9	33									1388	436		69	26	68		56	13		4
8:15-8:30	640	671		13	39									1657	502		82	27	84		69	15		6
8:30-8:45	727 314	793 504		13 3	44 27									1951 1137	570 272		92 46	32 11	95 59		77 44	18 12		8 6
8:45-9:00	796	915		14	52									2220	632		105	35	112		86	22		8
9:00-9:15	865	986		17	61									2417	662		121	36	125		92	24		8
9:15-9:30	935	1056		19	71									2600	698		130	37	136		104	25		8
9:30-9:45	980	1126		22	78									2764	726		141	41	150		112	29		11

ACTUAL TIME PERIOD VOLUME FIGURE

PERIOD	R1	S1	L1	TRR1	TRS1	TRL1	R2	S2	L2	TRR2	TRS2	TRL2	R3	S3	L3	TRR3	TRS3	TRL3	R4	S4	L4	TRR4	TRS4	TRL4
6:30-6:45	18	13	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45-7:00	75	47	0	0	1	0	0	0	0	0	0	0	0	141	43	0	9	6	7	0	1	2	0	0
7:00-7:15	122	55	0	1	3	0	0	0	0	0	0	0	0	181	69	0	9	6	11	0	6	2	0	0
7:15-7:30	107	76	0	1	7	0	0	0	0	0	0	0	0	264	85	0	15	6	7	0	6	2	0	0
7:30-7:45	90	98	0	1	6	0	0	0	0	0	0	0	0	215	73	0	14	2	12	0	15	3	0	2
7:45-8:00	70	122	0	3	7	0	0	0	0	0	0	0	0	282	90	0	12	4	16	0	14	1	0	0
8:00-8:15	87	146	0	3	8	0	0	0	0	0	0	0	0	305	76	0	10	2	15	0	14	3	0	2
8:15-8:30	71	114	0	4	6	0	0	0	0	0	0	0	0	269	66	0	13	1	16	0	13	2	0	2
8:30-8:45	87	122	0	0	5	0	0	0	0	0	0	0	0	294	68	0	10	5	11	0	8	3	0	2
8:45-9:00	69	122	0	1	8	0	0	0	0	0	0	0	0	269	62	0	13	3	17	0	9	4	0	0
9:00-9:15	69	71	0	3	9	0	0	0	0	0	0	0	0	197	30	0	16	1	13	0	6	2	0	0
9:15-9:30	70	70	0	2	10	0	0	0	0	0	0	0	0	183	36	0	9	1	11	0	12	1	0	0
9:30-9:45	45	70	0	3	7	0	0	0	0	0	0	0	0	164	28	0	11	4	14	0	8	4	0	3
9:45-10:0	33	38	0	1	5	0	0	0	0	0	0	0	0	98	17	0	6	1	7	0	5	1	0	1
7-10	920	1104	0	23	81	0	0	0	0	0	0	0	0	2721	700	0	138	36	150	0	116	28	0	12

8:9 337 921 1183 283 71 50

LOCATION NUMBER = 52 COMMUNITY = LINCILN

STREET NAME APPROACH #1= GREST ROAD (RTE 2A) DATE COUNTED = 12/13/88

STREET NAME APPROACH #2=

STREET NAME APPROACH #3= GREAT ROAD (RTE 2A)

STREET NAME APPROACH #4= HANSCOM DRIVE

PERIOD	R1	S1	L1	TRR1	TRS1	TRL1	R2	S2	L2	TRR2	TRS2	TRL2	R3	S3	L3	TRR3	TRS3	TRL3	R4	S4	L4	TRR4	TRS4	TRL4
2:30-2:45	20	121		0	17									107	13		6	0	27		24	2		1
2:45-3:00	46	256		3	23									231	32		18	2	41		87	3		2
3:00-3:15	70	364		3	33									351	59		31	3	117		246	6		5
3:15-3:30	103	524		3	52									487	74		44	3	166		295	7		7
3:30-3:45	128	698		5	56									599	88		59	3	230		362	14		8
3:45-4:00	146	863		5	73									721	104		66	3	282		408	18		11
4:00-4:15	170	1103		5	80									841	119		73	3	377		512	19		12
4:15-4:30	198	1355.		5	92									940	145		82	3	453		596	20		14
4:30-4:45	222	1633		8	103									1041	166		85	3	550		673	20		14
4:45-5:00	246	1898		11	112									1144	175		89	3	639		753	22		14
5:00-5:15	270	2343		15	120									1201	196		93	4	733		873	23		14
5:15-5:30	288	2552		15	130									1343	204		93	5	792		938	24		14
5:30-5:45	298	2862	26	16	137	30								1459	213	51	101	5	857	253	997	25	3	15
5:45-6:00	310	3158		16	142									1571	226		104	6	892		1055	25		15
6:00-6:15	327	3362		18	150									1697	232		107	6	931		1096	25		15
6:15-6:30	341	3575		18	157									1801	245		111	6	966		1125	26		15

PERIOD	R1	S1	L1	TRR1	TRS1	TRL1	R2	S2	L2	TRR2	TRS2	TRL2	R3	S3	L3	TRR3	TRS3	TRL3	R4	S4	L4	TRR4	TRS4	TRL4
2:30-2:45	20	121	0	0	17	0	0	0	0	0	0	0	0	107	13	0	6	0	27	0	24	2	0	1
2:45-3:00	26	135	0	3	6	0	0	0	0	0	0	0	0	124	19	0	12	2	14	0	63	1	0	1
3:00-3:15	24	108	0	0	10	0	0	0	0	0	0	0	0	120	27	0	13	1	76	0	159	3	0	3
3:15-3:30	33	160	0	0	19	0	0	0	0	0	0	0	0	136	15	0	13	0	49	0	49	1	0	2
3:30-3:45	25	174	0	2	4	0	0	0	0	0	0	0	0	112	14	0	15	0	64	0	67	7	0	1
3:45-4:00	18	165	0	0	17	0	0	0	0	0	0	0	0	122	16	0	7	0	52	0	46	4	0	3
4:00-4:15	24	240	0	0	7	0	0	0	0	0	0	0	0	120	15	0	7	0	95	0	104	1	0	1
4:15-4:30	28	252	0	0	12	0	0	0	0	0	0	0	0	99	26	0	9	0	76	0	84	1	0	2
4:30-4:45	24	278	0	3	11	0	0	0	0	0	0	0	0	101	21	0	3	0	97	0	77	0	0	0
4:45-5:00	24	265	0	3	9	0	0	0	0	0	0	0	0	103	9	0	4	0	89	0	80	2	0	0
5:00-5:15	24	445	0	4	8	0	0	0	0	0	0	0	0	57	21	0	4	1	94	0	120	1	0	0
5:15-5:30	18	209	0	0	10	0	0	0	0	0	0	0	0	142	8	0	0	1	59	0	65	1	0	0
5:30-5:45	10	310	0	1	7	0	0	0	0	0	0	0	0	112	9	0	8	0	65	0	59	1	0	1
5:45-6:00	12	296	0	0	5	0	0	0	0	0	0	0	0	116	13	0	3	1	35	0	58	0	0	0
TOTAL 3-6	264	2902	0	13	119	0	0	0	0	0	0	0	0	1340	194	0	86	4	851	0	968	22	0	13

12B CNTS

7:30-9:30

LOCATION NUMBER = 52 COMMUNITY = LINCOLN

STREET NAME APPROACH #1= GREAT ROAD (RTE 2A) DATE COUNTED = 12/13/88

STREET NAME APPROACH #2=

STREET NAME APPROACH #3= GREAT ROAD (RTE 2A)

STREET NAME APPROACH #4= HANSCOM DRIVE

PERIOD	R1	S1	L1	TRR1	TRS1	TRL1	R2	S2	L2	TRR2	TRS2	TRL2	R3	S3	L3	TRR3	TRS3
6:30-6:45	18	13	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
6:45-7:00	75	47	0	0	1	0	0	0	0	0	0	0	0	141	43	0	9
7:00-7:15	122	55	0	1	3	0	0	0	0	0	0	0	0	181	69	0	9
7:15-7:30	107	76	0	1	7	0	0	0	0	0	0	0	0	264	85	0	15
7:30-7:45	90	98	0	1	6	0	0	0	0	0	0	0	0	215	73	0	14
7:45-8:00	70	122	0	3	7	0	0	0	0	0	0	0	0	282	90	0	12
8:00-8:15	87	146	0	3	8	0	0	0	0	0	0	0	0	305	76	0	10
8:15-8:30	71	114	0	4	6	0	0	0	0	0	0	0	0	269	66	0	13
8:30-8:45	87	122	0	0	5	0	0	0	0	0	0	0	0	294	68	0	10
8:45-9:00	69	122	0	1	8	0	0	0	0	0	0	0	0	269	62	0	13
9:00-9:15	69	71	0	3	9	0	0	0	0	0	0	0	0	197	30	0	16
9:15-9:30	70	70	0	2	10	0	0	0	0	0	0	0	0	183	36	0	9
9:30-9:45	45	70	0	3	7	0	0	0	0	0	0	0	0	164	28	0	11
9:45-10:0	33	38	0	1	5	0	0	0	0	0	0	0	0	98	17	0	6
PERIOD	R1	S1	L1	TRR1	TRS1	TRL1	R2	S2	L2	TRR2	TRS2	TRL2	R3	S3	L3	TRR3	TRS3
7-8	389	351	0	6	23	0	0	0	0	0	0	0	0	942	317	0	50
% OF PPV	42.3	31.8	0.0	25.6	28.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	34.6	45.3	0.0	36.1
	332	532		11	27									1213	317		47
7:45-8:45	315	504	0	10	26	0	0	0	0	0	0	0	0	1150	300	0	45
% OF PPV	34.2	45.7	0.0	42.7	32.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	42.3	42.9	0.0	32.5
	415	644												1471	331		
8-9	383	575	0	11	36	0	0	0	0	0	0	0	0	1334	302	0	62
% OF PPV	41.6	52.1	0.0	46.9	44.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	49.0	43.1	0.0	44.8

TRL3	R4	S4	L4	TRR4	TRS4	TRL4	
0	0	0	0	0	0	0	
6	7	0	1	2	0	0	
6	11	0	6	2	0	0	HOURLY VOLUME
6	7	0	6	2	0	0	BY 15 MIN INTERVA
2	12	0	15	3	0	2	
4	16	0	14	1	0	0	2193 7-8
2	15	0	14	3	0	2	2399
1	16	0	13	2	0	2	2400
5	11	0	8	3	0	2	2484
3	17	0	9	4	0	0	2440 8-9
1	13	0	6	2	0	0	2186
1	11	0	12	1	0	0	2014
4	14	0	8	4	0	3	1760
1	7	0	5	1	0	1	1396 9-10
TRL3	R4	S4	L4	TRR4	TRS4	TRL4	
18	46	0	41	8	0	2	
49.9	30.7	0.0	35.4	28.3	0.0	17.3	

13	61		52	9		6
~~12~~	~~58~~	0	~~49~~	~~8~~	0	~~6~~
33.3	38.7	0.0	42.4	31.8	0.0	52.0

	91		59			
12	72	0	50	14	0	6
33.3	48.1	0.0	43.2	49.5	0.0	52.0

LOCATION NUMBER = 52 COMMUNITY = LINCILN

STREET NAME APPROACH #1= GREST ROAD (RTE 2A) DATE COUNTED = 12/13/88

STREET NAME APPROACH #2=

STREET NAME APPROACH #3= GREAT ROAD (RTE 2A)

STREET NAME APPROACH #4= HANSCOM DRIVE

PERIOD	R1	S1	L1	TRR1	TRS1	TRL1	R2	S2	L2	TRR2	TRS2	TRL2	R3	S3	L3	TRR3	TRS3
2:30-2:45	20	121	0	0	17	0	0	0	0	0	0	0	0	107	13	0	6
2:45-3:00	26	135	0	3	6	0	0	0	0	0	0	0	0	124	19	0	12
3:00-3:15	24	108	0	0	10	0	0	0	0	0	0	0	0	120	27	0	13
3:15-3:30	33	160	0	0	19	0	0	0	0	0	0	0	0	136	15	0	13
3:30-3:45	25	174	0	2	4	0	0	0	0	0	0	0	0	112	14	0	15
3:45-4:00	18	165	0	0	17	0	0	0	0	0	0	0	0	122	16	0	7
4:00-4:15	24	240	0	0	7	0	0	0	0	0	0	0	0	120	15	0	7
4:15-4:30	28	252	0	0	12	0	0	0	0	0	0	0	0	99	26	0	9
4:30-4:45	24	278	0	3	11	0	0	0	0	0	0	0	0	101	21	0	3
4:45-5:00	24	265	0	3	9	0	0	0	0	0	0	0	0	103	9	0	4
5:00-5:15	24	445	0	4	8	0	0	0	0	0	0	0	0	57	21	0	4
5:15-5:30	18	209	0	0	10	0	0	0	0	0	0	0	0	142	8	0	0
5:30-5:45	10	310	0	1	7	0	0	0	0	0	0	0	0	112	9	0	8
5:45-6:00	12	296	0	0	5	0	0	0	0	0	0	0	0	116	13	0	3
6:00-6:15	17	204	0	2	8	0	0	0	0	0	0	0	0	126	6	0	3
6:15-6:30	14	213	0	0	7	0	0	0	0	0	0	0	0	104	13	0	4
TOTAL 3-6	264	2902	0	13	119	0	0	0	0	0	0	0	0	1340	194	0	86

PERIOD	R1	S1	L1	TRR1	TRS1	TRL1	R2	S2	L2	TRR2	TRS2	TRL2	R3	S3	L3	TRR3	TRS3
5-6	64	1260	0	5	30	0	0	0	0	0	0	0	0	427	51	0	15
% OF PPV	24.2	43.4		38.5	25.2									31.9	26.3		17.4
		1308			42									380			21
4:15-5:15	100	1240	0	10	40	0	0	0	0	0	0	0	0	360	77	0	20
% OF PPV	37.9	42.7		76.9	33.6									26.9	39.7		23.3

JRL3	R4	S4	L4	TRR4	TRS4	TRL4	
0	27	0	24	2	0	1	
2	14	0	63	1	0	1	
1	76	0	159	3	0	3	
0	49	0	49	1	0	2	ERR
0	64	0	67	7	0	1	1912
0	52	0	46	4	0	3	1956
0	95	0	104	1	0	1	2026
0	76	0	84	1	0	2	2138
0	97	0	77	0	0	0	2268
0	89	0	80	2	0	0	2406
1	94	0	120	1	0	0	2571
1	59	0	65	1	0	0	2495
0	65	0	59	1	0	1	2463
1	35	0	58	0	0	0	2414
0	39	0	41	0	0	0	
0	35	0	29	1	0	0	
4	851	0	968	22	0	13	

TRL3	R4	S4	L4	TRR4	TRS4	TRL4
3	253	0	302	3	0	1
75.0	29.7		31.2	13.6		7.7
1	356	0	361	4	0	2
25.0	41.8		37.3	18.2		15.4

128 CORRIDOR PLANNING STUDY NORTH SHORE

Site Code : 06219012
N-S Street: WALTHAM ST
E-W Street: MARRETT ST (RTE 2A)
Weather : OVERCAST

PAGE: 1
FILE: L-12-MER

Sum of the Primary and Secondary

DATE: 6/21/99

Time Begin	From North RT	THRU	LT	From East RT	THRU	LT	From South RT	THRU	LT	From West RT	THRU	LT	Vehicle Total
6:45	35	53	3	7	49	11	6	39	20	19	17	10	269
7:00 AM	22	71	4	3	70	15	5	40	25	34	23	18	330
7:15	26	79	12	2	74	18	11	65	31	30	25	15	388
7:30	35	99	8	2	93	37	7	66	17	28	25	14	431
7:45	42	138	5	6	108	27	7	51	37	31	39	21	542
HR TOTAL	125	387	29	13	345	97	30	252	110	123	112	68	1691
8:00 AM	46	120	8	10	86	27	16	89	30	41	52	21	546
8:15	61	143	7	5	103	36	6	102	21	41	42	28	595
8:30	40	151	7	14	96	17	12	64	39	22	46	24	552
8:45	39	113	6	8	74	23	9	88	26	31	47	36	501
HR TOTAL	186	527	28	39	359	103	43	363	116	135	187	109	2194
9:00 AM	21	109	8	15	46	12	7	95	20	32	37	29	431
9:15	32	94	8	6	43	14	9	76	24	22	35	26	399
9:30	29	88	18	12	41	14	15	82	20	28	38	15	399
DAY TOTAL	427	1258	94	91	883	261	110	907	310	359	426	257	5383

PEAK PERIOD ANALYSIS FOR THE PERIOD: 6:45 AM - 09:45 AM

DIRECTION FROM	START PEAK HOUR	PEAK HR FACTOR	..... VOLUMES ..... Right	Thru	Left	Total	.... PERCENTS ... Right	Thru	Left
North	7:45 AM	0.91	189	552	27	768	25	72	4
East	7:30 AM	0.94	23	390	127	540	4	72	24
South	7:45 AM	0.97	41	356	127	524	8	68	24
West	8:00 AM	0.95	135	187	109	431	31	43	25
Entire Intersection									
North	7:45 AM	0.91	189	552	27	768	25	72	4
East		0.93	35	393	107	535	7	73	20
South		0.97	41	356	127	524	8	68	24
West		0.89	135	179	94	408	33	44	23

128 CORRIDOR PLANNING STUDY NORTH SHORE

Site Code : 06219012
N-S Street: WALTHAM ST
E-W Street: MARRETT ST (RTE 2A)
Weather : OVERCAST

Sum of the Primary and Secondary

FILE: L-12-MER
DATE: 6/21/90

Time Begin	From North RT	THRU	LT	From East RT	THRU	LT	From South RT	THRU	LT	From West RT	THRU	LT	Vehicle Total
11:00 AM	15	79	17	10	37	17	9	72	17	30	34	22	359
11:15	24	85	9	11	36	20	16	82	18	21	49	22	392
11:30	30	96	11	11	46	15	17	91	18	29	50	29	443
11:45	14	101	15	13	48	23	13	90	19	31	59	46	472
HR TOTAL	83	361	51	45	167	75	55	335	72	111	192	119	1666
12:00 PM	27	109	15	15	56	14	21	92	17	23	68	54	508
12:15	29	107	17	16	58	12	25	79	25	24	44	49	491
12:30	31	104	11	15	55	19	25	84	19	21	50	33	468
12:45	43	115	17	10	55	22	14	106	22	29	39	32	511
HR TOTAL	140	434	60	56	224	70	85	365	83	97	201	168	1978
1:00 PM	47	105	19	14	45	17	31	98	19	22	54	39	512
1:15	31	117	17	11	44	15	15	102	19	12	45	41	466
DAY TOTAL	301	1017	146	126	483	177	186	900	188	243	492	367	4622

PEAK PERIOD ANALYSIS FOR THE PERIOD: 11:00 AM - 01:30 PM

DIRECTION FROM	START PEAK HOUR	PEAK HR FACTOR	VOLUMES Right	Thru	Left	Total	PERCENTS Right	Thru	Left
North	12:30 PM	0.92	152	441	63	656	23	67	10
East	12:00 PM	0.98	56	224	70	350	16	64	20
South	12:30 PM	0.94	85	394	78	557	15	71	14
West	11:30 AM	0.87	107	221	178	506	21	44	35
Entire Intersection									
North	12:15 PM	0.91	160	431	63	654	24	66	10
East		0.96	55	216	71	342	16	63	21
South		0.93	95	371	84	550	17	67	15
West		0.93	96	187	153	436	22	43	35

128 CORRIDOR PLANNING STUDY NORTH SHORE

Site Code : 06219012
N-S Street: WALTHAM ST
E-W Street: MARRETT ST (RTE 2A)
Weather : OVERCAST

PAGE: 1
FILE: L-12-MER

Sum of the Primary and Secondary

DATE: 6/21/90

Time Begin	From North RT	THRU	LT	From East RT	THRU	LT	From South RT	THRU	LT	From West RT	THRU	LT	Vehicle Total
3:00 PM	29	90	15	13	42	27	16	93	16	31	43	36	451
3:15	29	127	9	13	38	18	19	106	19	31	38	29	496
3:30	31	101	14	9	51	23	21	94	23	39	73	25	504
3:45	23	91	10	10	44	19	15	132	28	32	58	37	499
HR TOTAL	112	409	48	45	175	87	71	425	86	133	232	127	1950
4:00 PM	34	117	10	14	43	19	24	133	27	30	74	23	548
4:15	35	105	16	12	56	18	38	119	16	34	93	44	585
4:30	24	127	12	20	50	26	21	128	23	31	76	46	584
4:45	30	115	21	16	51	25	21	143	26	41	112	30	631
HR TOTAL	123	464	59	62	200	88	104	522	92	136	355	143	2348
5:00 PM	26	147	17	9	54	33	20	132	25	33	113	64	673
5:15	32	140	10	21	48	25	26	168	31	31	101	54	711
5:30	36	128	15	22	70	25	40	157	27	26	98	50	695
5:45	26	125	19	9	51	24	25	155	32	39	80	44	629
HR TOTAL	121	540	61	62	243	110	111	612	115	129	392	212	2708
6:00 PM	18	123	14	14	49	19	29	166	30	36	95	45	638
6:15	20	110	8	16	52	20	15	144	21	22	70	33	531
DAY TOTAL	394	1646	190	199	719	324	330	1869	344	456	1144	560	8175

PEAK PERIOD ANALYSIS FOR THE PERIOD: 03:00 PM - 06:30 PM

DIRECTION FROM	START PEAK HOUR	PEAK HR FACTOR	..... VOLUMES ..... Right	Thru	Left	Total	.... PERCENTS ... Right	Thru	Left
North	5:00 PM	0.95	121	540	61	722	17	75	9
East	4:45 PM	0.90	69	243	111	423	16	57	26
South	5:15 PM	0.92	120	646	120	886	14	73	14
West	4:45 PM	0.90	131	424	198	753	17	56	26
Entire Intersection									
North	4:45 PM	0.94	125	530	63	718	17	74	9
East		0.90	69	243	111	423	16	57	26
South		0.91	107	660	109	876	13	74	13
West		0.90	131	424	198	753	17	56	26

LOCATION NUMBER = 34 COMMUNITY = LEXINGTON
STREET NAME APPROACH #1= MARRETT ROAD DATE COUNTED = 11/17/88
STREET NAME APPROACH #2=
STREET NAME APPROACH #3= MASS AVE (2A)
STREET NAME APPROACH #4= OLD MASS AVE

CUMULATIVE VOLUME FIGURES

PERIOD	R1	S1	L1	TRR1	TRS1	TRL1	R2	S2	L2	TRR2	TRS2	TRL2	R3	S3	L3	TRR3	TRS3	TRL3	R4	S4	L4	TRR4	TRS4	TRL4	PED1	PED2
6:30-6:45	0	0		0										0	0	0			0		0	0		0		
6:47-7:00	1	157		2										87	18	3			9		2	0		1		
7:00-7:15	2	362		4										211	36	6			26		4	0		2		
7:15-7:30	4	593		23										367	70	9			60		6	0		2		
7:30-7:45	4	800		34										534	98	15			93		10	0		4		
7:45-8:00	5	978		39										705	144	17			136		11	0		5		
8:00-8:15	8	1214		48										861	177	22			170		12	0		5		
8:15-8:30	9	1423		58										1025	205	26			189		17	0		6		
8:30-8:45	10	1603		70										1207	245	35			208		19	0		6		
8:45-9:00	11	1758		80										1435	279	44			221		21	0		6		
9:00-9:15	12	1998		90										1626	311	52			231		22	0		6		
9:15-9:30	14	2183		108										1785	331	59			240		22	1		6		
9:30-9:45	15	2341		118										1930	352	71			253		24	1		6		

ACTUAL TIME PERIOD VOLUME FIGURE

PERIOD	R1	S1	L1	TRR1	TRS1	TRL1	R2	S2	L2	TRR2	TRS2	TRL2	R3	S3	L3	TRR3	TRS3	TRL3	R4	S4	L4	TRR4	TRS4	TRL4	
6:30-6:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
6:45-7:00	1	157	0	2	0	0	0	0	0	0	0	0	0	87	18	3	0	0	9	0	2	0	0	1	
7:00-7:15	1	205	0	2	0	0	0	0	0	0	0	0	0	124	18	3	0	0	17	0	2	0	0	1	HOURLY VOLUME
7:15-7:30	2	231	0	19	0	0	0	0	0	0	0	0	0	156	34	3	0	0	34	0	2	0	0	0	BY 15 MIN INTERVAL
7:30-7:45	0	207	0	11	0	0	0	0	0	0	0	0	0	167	28	6	0	0	33	0	4	0	0	2	% OF P
7:45-8:00	1	178	0	5	0	0	0	0	0	0	0	0	0	171	46	2	0	0	43	0	1	0	0	1	1760 7-8
8:00-8:15	3	236	0	9	0	0	0	0	0	0	0	0	0	156	33	5	0	0	34	0	1	0	0	0	1864
8:15-8:30	1	209	0	10	0	0	0	0	0	0	0	0	0	164	28	4	0	0	19	0	5	0	0	1	1824
8:30-8:45	1	180	0	12	0	0	0	0	0	0	0	0	0	182	40	9	0	0	19	0	2	0	0	0	1811
8:45-9:00	1	155	0	10	0	0	0	0	0	0	0	0	0	228	34	9	0	0	13	0	2	0	0	0	1815 8-9
9:00-9:15	1	240	0	10	0	0	0	0	0	0	0	0	0	191	32	8	0	0	10	0	1	0	0	0	1831
9:15-9:30	2	185	0	18	0	0	0	0	0	0	0	0	0	159	20	7	0	0	9	0	0	1	0	0	1791
9:30-9:45	1	158	0	10	0	0	0	0	0	0	0	0	0	145	21	12	0	0	13	0	2	0	0	0	1708
9:45-10:0	1	105	0	7	0	0	0	0	0	0	0	0	0	89	13	5	0	0	6	0	1	0	0	0	1482 9-10
7-10	15	2289	0	123	0	0	0	0	0	0	0	0	0	1932	347	73	0	0	250	0	23	1	0	5	

TOTAL 5057

LOCATION NUMBER = 34 COMMUNITY = LEXINGTON

STREET NAME APPROACH #1= MARRETT ROAD DATE COUNTED = 11/17/88

STREET NAME APPROACH #2=

STREET NAME APPROACH #3= MASS AVE (2A)

STREET NAME APPROACH #4= OLD MASS AVE

CUMULATIVE VOLUME FIGURES

PERIOD	R1	S1	L1	TRR1	TRS1	TRL1	R2	S2	L2	TRR2	TRS2	TRL2	R3	S3	L3	TRR3	TRS3	TRL3	R4	S4	L4	TRR4	TRS4	TRL4	PED1	PED2
2:30-2:45	0	0		0										0	0	0			0		0	0		0		
2:45-3:00	0	0		0										0	0	0			0		0	0		0		
3:00-3:15	2	126		8										286	11	10			13		1	0		1		
3:15-3:30	2	309		11										467	34	19			31		3	0		1		
3:30-3:45	6	478		18										661	58	23			51		8	0		1		
3:45-4:00	9	652		27										855	75	29			80		16	0		1		
4:00-4:15	11	849		33										1102	106	32			102		29	0		1		
4:15-4:30	12	1005		34										1304	120	34			135		36	2		1		
4:30-4:45	14	1196		40										1520	136	37			163		43	3		1		
4:45-5:00	16	1436		42										1745	157	39			183		49	3		1		
5:00-5:15	18	1663		45										1966	170	41			219		55	3		1		
5:15-5:30	19	1913		50										2175	189	44			248		64	31		1		
5:30-5:45	20	2149		52										2340	206	48			269		67	3		1		
5:45-6:00	22	2358		57										2507	225	48			292		75	4		1		
6:00-6:15	22	2563		58										2630	232	49			314		83	4		3		
6:15-6:30	25	2748		59										2770	243	49			376		89	4		3		

ACTUAL TIME PERIOD VOLUME FIGURE

PERIOD	R1	S1	L1	TRR1	TRS1	TRL1	R2	S2	L2	TRR2	TRS2	TRL2	R3	S3	L3	TRR3	TRS3	TRL3	R4	S4	L4	TRR4	TRS4	TRL4	
2:30-2:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
2:45-3:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
3:00-3:15	2	126	0	8	0	0	0	0	0	0	0	0	0	286	11	10	0	0	13	0	1	0	0	1	HOURLY VOLUME
3:15-3:30	0	183	0	3	0	0	0	0	0	0	0	0	0	181	23	9	0	0	18	0	2	0	0	0	BY 15 MIN INTERVAL
3:30-3:45	4	169	0	7	0	0	0	0	0	0	0	0	0	194	24	4	0	0	20	0	5	0	0	0	% OF P
3:45-4:00	3	174	0	9	0	0	0	0	0	0	0	0	0	194	17	6	0	0	29	0	8	0	0	0	1744 3-4
4:00-4:15	2	197	0	6	0	0	0	0	0	0	0	0	0	247	31	3	0	0	22	0	13	0	0	0	1807
4:15-4:30	1	156	0	1	0	0	0	0	0	0	0	0	0	202	14	2	0	0	33	0	7	2	0	0	1806
4:30-4:45	2	191	0	6	0	0	0	0	0	0	0	0	0	216	16	3	0	0	28	0	7	1	0	0	1849
4:45-5:00	2	240	0	2	0	0	0	0	0	0	0	0	0	225	21	2	0	0	20	0	6	0	0	0	1927 4-5
5:00-5:15	2	227	0	3	0	0	0	0	0	0	0	0	0	221	13	2	0	0	36	0	6	0	0	0	1916
5:15-5:30	1	250	0	5	0	0	0	0	0	0	0	0	0	209	19	3	0	0	29	0	9	0	0	0	2023 0.362
5:30-5:45	1	236	0	2	0	0	0	0	0	0	0	0	0	165	17	4	0	0	21	0	3	0	0	0	2002
5:45-6:00	2	209	0	5	0	0	0	0	0	0	0	0	0	167	19	0	0	0	23	0	8	1	0	0	1918 5-6
3-6	22	2358	0	57	0	0	0	0	0	0	0	0	0	2507	225	48	0	0	292	0	75	4	0	1	

5589

LOCATION NUMBER = 32 COMMUNITY = LEXINGTON

STREET NAME APPROACH #1= MASS AVE (2A) DATE COUNTED = 11/17/88

STREET NAME APPROACH #2=

STREET NAME APPROACH #3= MASS AVE (2A)

STREET NAME APPROACH #4= WOOD STREET

CUMULATIVE VOLUME FIGURES

PERIOD	R1	S1	L1	TRR1	TRS1	TRL1	R2	S2	L2	TRR2	TRS2	TRL2	R3	S3	L3	TRR3	TRS3	TRL3	R4	S4	L4	TRR4	TRS4	TRL4	PED1	PED2	P
6:30-6:45	15	6		0										9	17	4			5		7	1		2			
6:45-7:00	41	16		1										19	32	12			13		18	3		2			
7:00-7:15	117	31		3										30	61	26			20		32	3		2			
7:15-7:30	231	44		4										42	91	31			33		67	4		4			
7:30-7:45	381	72		10										53	113	38			44		116	4		4			
7:45-8:00	561	108		14										87	144	52			60		157	5		7			
8:00-8:15	752	128		17										105	185	62			78		194	11		9			
8:15-8:30	931	156		20										124	212	65			90		229	14		10			
8:30-8:45	1056	182		21										143	249	70			103		270	16		14			
8:45-9:00	1154	204		25										174	286	79			126		324	19		16			
9:00-9:15	1227	237		27										201	317	82			137		367	21		19			
9:15-9:30	1262	262		30										234	338	89			150		388	23		20			
9:30-9:45	1301	274		36										251	363	97			165		404	26		20			

ACTUAL TIME PERIOD VOLUME FIGURE

PERIOD	R1	S1	L1	TRR1	TRS1	TRL1	R2	S2	L2	TRR2	TRS2	TRL2	R3	S3	L3	TRR3	TRS3	TRL3	R4	S4	L4	TRR4	TRS4	TRL4	
6:30-6:45	15	6	0	0	0	0	0	0	0	0	0	0	0	9	17	4	0	0	5	0	7	1	0	2	
6:45-7:00	26	10	0	1	0	0	0	0	0	0	0	0	0	10	15	8	0	0	8	0	11	2	0	0	
7:00-7:15	76	15	0	2	0	0	0	0	0	0	0	0	0	11	29	14	0	0	7	0	14	0	0	0	HOURLY VOLUME
7:15-7:30	114	13	0	1	0	0	0	0	0	0	0	0	0	12	30	5	0	0	13	0	35	1	0	2	BY 15 MIN INTERVALS
7:30-7:45	150	28	0	6	0	0	0	0	0	0	0	0	0	11	22	7	0	0	11	0	49	0	0	0	% OF PP
7:45-8:00	180	36	0	4	0	0	0	0	0	0	0	0	0	34	31	14	0	0	16	0	41	1	0	3	1038 7-8
8:00-8:15	191	20	0	3	0	0	0	0	0	0	0	0	0	18	41	10	0	0	18	0	37	6	0	2	1216
8:15-8:30	179	28	0	3	0	0	0	0	0	0	0	0	0	19	27	3	0	0	12	0	35	3	0	1	1300
8:30-8:45	125	26	0	1	0	0	0	0	0	0	0	0	0	19	37	5	0	0	13	0	41	2	0	4	1289
8:45-9:00	98	22	0	4	0	0	0	0	0	0	0	0	0	31	37	9	0	0	23	0	54	3	0	2	1212 8-9
9:00-9:15	73	33	0	2	0	0	0	0	0	0	0	0	0	27	31	3	0	0	11	0	43	2	0	3	1094
9:15-9:30	35	25	0	3	0	0	0	0	0	0	0	0	0	33	21	7	0	0	13	0	21	2	0	1	945
9:30-9:45	39	12	0	6	0	0	0	0	0	0	0	0	0	17	25	8	0	0	15	0	16	3	0	0	813
9:45-10:0	26	13	0	2	0	0	0	0	0	0	0	0	0	14	14	3	0	0	7	0	14	1	0	1	625 9-10
7-10	1286	271	0	37	0	0	0	0	0	0	0	0	0	246	345	88	0	0	159	0	400	24	0	19	

1337 282 38 256 359 92 165 416 25 20

TOTAL 2875

1367 290 296 411 190 436

712 120 99 147 69 194

700 112 16 82 121 34 57 162 10 6

728 117 17 85 126 35 59 168 10 6

LOCATION NUMBER = 32 COMMUNITY = LEXINGTON

STREET NAME APPROACH #1= MASS AVE (2A) DATE COUNTED = 11/17/88

STREET NAME APPROACH #2=

STREET NAME APPROACH #3= MASS AVE (2A)

STREET NAME APPROACH #4= WOOD STREET

CUMULATIVE VOLUME FIGURES

PERIOD	R1	S1	L1	TRR1	TRS1	TRL1	R2	S2	L2	TRR2	TRS2	TRL2	R3	S3	L3	TRR3	TRS3	TRL3	R4	S4	L4	TRR4	TRS4	TRL4	PED1	PED2
2:30-2:45	0	0		0										0	0	0			0		0	0		0		
2:45-3:00	0	0		0										0	0	0			0		0	0		0		
3:00-3:15	30	26		0										22	15	2			14		34	0		0		
3:15-3:30	60	58		1										40	29	3			23		78	0		0		
3:30-3:45	103	76		1										64	46	4			56		149	0		0		
3:45-4:00	129	95		1										97	63	4			70		193	0		0		
4:00-4:15	170	123		4										113	77	4			95		261	0		3		
4:15-4:30	218	135		8										130	94	6			116		343	0		5		
4:30-4:45	262	151		11										158	112	6			135		498	0		9		
4:45-5:00	305	177		11										182	128	6			162		639	1		10		
5:00-5:15	367	198		14										206	152	7			195		805	3		10		
5:15-5:30	416	222		14										241	166	10			218		919	3		12		
5:30-5:45	460	251		14										283	186	10			246		1031	3		12		
5:45-6:00	500	268		16										307	203	10			268		1131	3		12		
6:00-6:15	539	296		16										331	219	10			299		1190	3		12		
6:15-6:30	573	312		16										359	241	10			311		1230	3		13		

ACTUAL TIME PERIOD VOLUME FIGURE

PERIOD	R1	S1	L1	TRR1	TRS1	TRL1	R2	S2	L2	TRR2	TRS2	TRL2	R3	S3	L3	TRR3	TRS3	TRL3	R4	S4	L4	TRR4	TRS4	TRL4			
2:30-2:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
2:45-3:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
3:00-3:15	30	26	0	0	0	0	0	0	0	0	0	0	0	22	15	2	0	0	14	0	34	0	0	0	HOURLY VOLUME		
3:15-3:30	30	32	0	1	0	0	0	0	0	0	0	0	0	18	14	1	0	0	9	0	44	0	0	0	BY 15 MIN INTERVAL		
3:30-3:45	43	18	0	0	0	0	0	0	0	0	0	0	0	24	17	1	0	0	33	0	71	0	0	0		% OF P	
3:45-4:00	26	19	0	0	0	0	0	0	0	0	0	0	0	33	17	0	0	0	14	0	44	0	0	0	652 3-4		
4:00-4:15	41	28	0	3	0	0	0	0	0	0	0	0	0	16	14	0	0	0	25	0	68	0	0	3	707		
4:15-4:30	48	12	0	4	0	0	0	0	0	0	0	0	0	17	17	2	0	0	21	0	82	0	0	2	763		
4:30-4:45	44	16	0	3	0	0	0	0	0	0	0	0	0	28	18	0	0	0	19	0	155	0	0	4	843		
4:45-5:00	43	26	0	0	0	0	0	0	0	0	0	0	0	24	16	0	0	0	27	0	141	1	0	1	969 4-5		
5:00-5:15	62	21	0	3	0	0	0	0	0	0	0	0	0	24	24	1	0	0	33	0	166	2	0	0	1107		
5:15-5:30	49	24	0	0	0	0	0	0	0	0	0	0	0	35	14	3	0	0	23	0	114	0	0	2	1166		0.429
5:30-5:45	44	29	0	0	0	0	0	0	0	0	0	0	0	42	20	0	0	0	28	0	112	0	0	0	1154		
5:45-6:00	40	17	0	2	0	0	0	0	0	0	0	0	0	24	17	0	0	0	22	0	100	0	0	0	1097 5-6		
3-6	500	268	0	16	0	0	0	0	0	0	0	0	0	307	203	10	0	0	268	0	1131	3	0	12			

2718

LOCATION NUMBER = R033
STREET NAME APPROACH #1= MINUTE
STREET NAME APPROACH #2= MARKET
STREET NAME APPROACH #3= MASS A
STREET NAME APPROACH #4= MARKET

COMMUNITY = LEXING
DATE COUNTED = 5/24/90
DATE ADJUSTED =
DATE ADJUSTED =
DATE ADJUSTED =
DATE ADJUSTED =

CUMULATIVE VOLUME FIGURES

PERIOD	R1	S1	L1	TRR1	TRS1	TRL1	R2	S2	L2	TRR2	TRS2	TRL2
6:30-6:45	0	0	0	0	0	0	0	0	0	0	0	0
6:45-7:00	1	0	0	0	1	0	5	42	4	1	2	0
7:00-7:15	3	0	2	0	2	0	7	152	10	2	3	0
7:15-7:30	10	2	3	3	4	0	10	276	17	2	8	0
7:30-7:45	13	2	3	16	9	0	15	429	38	2	10	0
7:45-8:00	17	5	4	24	15	1	23	630	51	2	22	0
8:00-8:15	24	10	6	27	17	1	29	794	66	2	28	0
8:15-8:30	27	14	7	29	18	1	38	940	82	2	33	3
8:30-8:45	33	14	7	30	18	1	41	1087	99	2	39	3
8:45-9:00	45	16	8	33	18	1	50	1287	134	3	51	3
9:00-9:15	56	17	9	34	13	1	59	1395	155	3	57	4
9:15-9:30	60	17	9	34	18	2	59	1484	167	3	59	4
9:30-9:45	65	18	9	35	18	2	69	1599	177	3	69	4

CUMULATIVE VOLUME FIGURES

PERIOD	R3	S3	L3	TRR3	TRS3	TRL3	R4	S4	L4	TRR4	TRS4	TRL4
6:30-6:45	0	0	0	0	0	0	0	0	0	0	0	0
6:45-7:00	1	5	4	0	0	0	12	125	12	0	2	0
7:00-7:15	6	8	14	0	0	0	32	350	32	0	7	0
7:15-7:30	25	12	22	0	0	1	54	562	76	2	14	0
7:30-7:45	29	16	45	0	0	2	70	754	134	2	29	6
7:45-8:00	40	35	56	0	1	2	91	935	216	3	55	14
8:00-8:15	44	36	74	0	1	3	111	1092	236	3	58	14
8:15-8:30	53	38	97	0	1	4	147	1256	263	3	61	15
8:30-8:45	64	41	110	0	1	5	180	1408	292	3	67	16
8:45-9:00	74	46	121	1	1	6	220	1566	322	4	75	16
9:00-9:15	91	61	140	1	1	6	249	1678	345	5	89	16
9:15-9:30	95	63	152	1	1	6	262	1763	354	5	94	16
9:30-9:45	105	65	167	2	1	11	279	1885	360	6	101	18

ACTUAL TIME PERIOD VOLUME FIGURE

PERIOD	R1	S1	L1	TRR1	TRS1	TRL1	R2	S2	L2	TRR2	TRS2	TRL2
6:30-6:45	0	0	0	0	0	0	0	0	0	0	0	0
6:45-7:00	1	0	0	0	1	0	5	42	4	1	2	0
7:00-7:15	2	0	2	0	1	0	2	110	6	1	1	0
7:15-7:30	7	2	1	3	2	0	3	124	7	0	5	0
7:30-7:45	3	0	0	13	5	0	5	153	21	0	2	0
7:45-8:00	4	3	1	3	6	1	8	201	13	0	12	0
8:00-8:15	7	5	2	3	2	0	6	164	15	0	6	0
8:15-8:30	3	4	1	2	1	0	9	146	16	0	5	3
8:30-8:45	6	0	0	1	0	0	3	147	17	0	6	0
8:45-9:00	12	2	1	3	0	0	9	200	35	1	12	0
9:00-9:15	11	1	1	1	0	0	8	108	21	0	6	1
9:15-9:30	4	0	0	0	0	1	1	89	12	0	2	0
9:30-9:45	5	1	0	1	0	0	10	115	10	0	10	0
TOTAL	65	18	9	35	18	2	69	1599	177	3	69	4

LOCATION NUMBER = 9033
STREET NAME APPROACH #1= MINUTE
STREET NAME APPROACH #2= MARKET
STREET NAME APPROACH #3= MASS A
STREET NAME APPROACH #4= MARKET

COMMUNITY = LEXING
DATE COUNTED = 5/24/90
DATE ADJUSTED =
DATE ADJUSTED =
DATE ADJUSTED =
DATE ADJUSTED =

ACTUAL TIME PERIOD VOLUME FIGURE

PERIOD	R3	S3	L3	TRR3	TRS3	TRL3	R4	S4	L4	TRR4	TRS4	TRL4
5:30-6:45	0	0	0	0	0	0	0	0	0	0	0	0
6:45-7:00	1	5	4	0	0	0	12	125	12	0	2	0
7:00-7:15	5	3	10	0	0	0	20	225	20	0	5	0
7:15-7:30	19	4	3	0	0	1	22	212	44	2	7	0
7:30-7:45	4	4	24	0	0	1	16	192	58	0	15	6
7:45-8:00	11	19	10	0	1	0	21	181	82	1	26	8
8:00-8:15	4	1	18	0	0	1	20	157	20	0	3	0
8:15-8:30	9	2	23	0	0	1	36	164	27	0	3	1
8:30-8:45	11	3	13	0	0	1	33	152	29	0	6	1
8:45-9:00	10	5	11	1	0	1	40	159	30	1	8	0
9:00-9:15	17	15	19	0	0	0	29	112	23	1	14	0
9:15-9:30	4	2	12	0	0	0	13	85	9	0	5	0
9:30-9:45	10	2	15	1	0	5	16	122	6	1	7	2
TOTAL	105	65	167	2	1	11	278	1885	360	6	101	18

ACTUAL TIME PERIOD VOLUME FIGURE

PERIOD	ENTER	EXIT	ENTER	EXIT	ENTER	EXIT	ENTER	EXIT
5:30-6:45	0	0	0	0	0	0	0	0
6:45-7:00	2	23	54	128	10	17	151	49
7:00-7:15	5	26	120	237	18	27	270	123
7:15-7:30	15	51	139	239	32	35	287	148
7:30-7:45	21	73	181	211	33	42	287	196
7:45-8:00	23	118	234	220	41	44	319	235
8:00-8:15	19	27	191	166	24	42	200	199
8:15-8:30	11	39	179	177	35	60	231	190
8:30-8:45	7	36	173	169	28	50	221	174
8:45-9:00	18	45	257	173	28	78	237	239
9:00-9:15	14	46	144	144	51	53	179	145
9:15-9:30	5	12	104	95	18	25	112	107
9:30-9:45	7	20	145	140	33	28	154	151
TOTAL	147	516	1921	2104	351	501	2648	1946

LOCATION NUMBER = 0033
STREET NAME APPROACH #1= MINUTE
STREET NAME APPROACH #2= MARKET
STREET NAME APPROACH #3= MASS A
STREET NAME APPROACH #4= MARKET

COMMUNITY = LEXING
DATE COUNTED = 5/24/90
DATE ADJUSTED =
DATE ADJUSTED =
DATE ADJUSTED =
DATE ADJUSTED =

CUMULATIVE VOLUME FIGURES

PERIOD	R1	S1	L1	TRR1	TPS1	TRL1	R2	S2	L2	TRR2	TRS2	TRL2
11:00-11:15	8	4	5	1	1	1	1	124	18	0	8	0
11:15-11:30	22	10	6	1	1	1	2	230	42	1	18	0
11:30-11:45	26	11	6	1	1	1	4	339	61	1	20	0
11:45-12:00	43	14	7	1	1	1	7	461	75	1	33	0
12:00-12:15	57	17	9	1	1	1	11	568	98	2	37	0
12:15-12:30	68	24	16	4	1	1	15	667	119	2	43	1
12:30-12:45	92	34	17	4	1	1	20	781	143	2	52	2
12:45-1:00	100	37	19	4	2	1	21	866	151	2	56	2
1:00-1:15	116	38	21	4	2	1	24	989	175	2	60	5
1:15-1:30	124	39	21	4	2	4	28	1101	189	2	71	6
N/A												
N/A												
N/A												

CUMULATIVE VOLUME FIGURES

PERIOD	R3	S3	L3	TRR3	TRS3	TRL3	R4	S4	L4	TRR4	TRS4	TRL4
11:00-11:15	7	1	5	0	0	0	14	90	9	1	14	0
11:15-11:30	15	4	20	0	2	2	22	205	17	1	18	1
11:30-11:45	23	6	34	0	2	2	36	310	31	1	21	1
11:45-12:00	55	12	61	1	2	2	50	426	49	3	26	1
12:00-12:15	72	18	78	2	3	2	63	521	62	5	37	2
12:15-12:30	87	20	92	3	3	2	72	626	71	5	43	3
12:30-12:45	103	21	113	3	3	2	82	739	78	5	54	3
12:45-1:00	117	27	125	3	4	2	98	839	88	11	61	4
1:00-1:15	129	29	143	3	4	3	120	974	98	13	71	5
1:15-1:30	145	32	153	5	4	4	137	1094	112	15	80	5
N/A												
N/A												
N/A												

ACTUAL TIME PERIOD VOLUME FIGURE

PERIOD	R1	S1	L1	TRR1	TRS1	TRL1	R2	S2	L2	TRR2	TRS2	TRL2
11:00-11:15	8	4	5	1	1	1	1	124	18	0	8	0
11:15-11:30	14	6	1	0	0	0	1	106	24	1	10	0
11:30-11:45	4	1	0	0	0	0	2	109	19	0	2	0
11:45-12:00	17	3	1	0	0	0	3	122	14	0	13	0
12:00-12:15	14	3	2	0	0	0	4	107	23	1	4	0
12:15-12:30	11	9	7	3	0	0	4	99	21	0	6	1
12:30-12:45	24	8	1	0	0	0	5	114	24	0	9	1
12:45-1:00	8	3	2	0	1	0	1	85	8	0	4	0
1:00-1:15	16	1	2	0	0	0	3	123	24	0	4	3
1:15-1:30	8	1	0	0	0	3	4	112	14	0	11	1
N/A												
N/A												
N/A												
TOTAL	124	39	21	4	2	4	28	1101	189	2	71	6

LOCATION NUMBER = 3033
STREET NAME APPROACH #1= MINUTE
STREET NAME APPROACH #2= MARKET
STREET NAME APPROACH #3= MASS A
STREET NAME APPROACH #4= MARKET

COMMUNITY = LEXING
DATE COUNTED = 5/24/90
DATE ADJUSTED =
DATE ADJUSTED =
DATE ADJUSTED =
DATE ADJUSTED =

ACTUAL TIME PERIOD VOLUME FIGURE

PERIOD	R3	S3	L3	TRR3	TRS3	TRL3	R4	S4	L4	TRR4	TRS4	TRL4
11:00-11:15	7	1	8	0	0	0	14	90	9	1	14	0
11:15-11:30	8	3	12	0	2	2	8	115	8	0	4	1
11:30-11:45	8	2	14	0	0	0	14	105	14	0	3	0
11:45-12:00	32	6	27	1	0	0	14	116	18	2	5	0
12:00-12:15	17	6	17	1	1	0	13	95	13	2	11	1
12:15-12:30	15	2	14	1	0	0	9	105	9	0	6	1
12:30-12:45	16	1	21	0	0	0	10	113	7	0	11	0
12:45-1:00	14	6	12	0	1	0	16	100	10	6	7	1
1:00-1:15	12	2	24	0	0	1	22	135	10	2	10	1
1:15-1:30	16	3	14	2	0	1	17	120	14	2	9	0
N/A												
N/A												
N/A												
TOTAL	145	32	163	5	4	4	137	1094	112	15	80	5

ACTUAL TIME PERIOD VOLUME FIGURE

PERIOD	ENTER	EXIT	ENTER	EXIT	ENTER	EXIT	ENTER	EXIT
11:00-11:15	20	11	151	117	16	38	128	149
11:15-11:30	21	16	142	128	27	38	136	144
11:30-11:45	5	19	132	116	24	34	136	129
11:45-12:00	21	27	152	155	66	33	155	179
12:00-12:15	19	26	139	126	42	41	135	142
12:15-12:30	30	16	131	134	32	40	130	133
12:30-12:45	33	13	153	141	38	43	141	168
12:45-1:00	14	19	98	123	33	34	140	109
1:00-1:15	19	16	157	159	39	52	180	168
1:15-1:30	12	21	142	150	36	35	162	146
N/A	0	0	0	0	0	0	0	0
N/A	0	0	0	0	0	0	0	0
N/A	0	0	0	0	0	0	0	0
TOTAL	194	193	1397	1349	353	388	1443	1467

LOCATION NUMBER = 3033
STREET NAME APPROACH #1= MINUTE
STREET NAME APPROACH #2= MARKET
STREET NAME APPROACH #3= MASS A
STREET NAME APPROACH #4= MARKET

COMMUNITY = LEXING
DATE COUNTED = 5/24/90
DATE ADJUSTED =
DATE ADJUSTED =
DATE ADJUSTED =
DATE ADJUSTED =

CUMULATIVE VOLUME FIGURES

PERIOD	R1	S1	L1	TRR1	TRS1	TRL1	R2	S2	L2	TRR2	TRS2	TRL2
2:30-2:45	0	0	0	0	0	0	0	0	0	0	0	0
2:45-3:00	0	0	0	0	0	0	0	0	0	0	0	0
3:00-3:15	27	8	2	0	0	0	2	313	25	0	8	1
3:15-3:30	59	11	3	0	0	0	2	459	45	0	17	4
3:30-3:45	85	17	4	1	2	0	3	698	62	0	18	7
3:45-4:00	104	23	5	3	3	0	3	903	75	0	20	7
4:00-4:15	125	26	8	3	3	0	3	1140	93	0	26	7
4:15-4:30	134	27	9	3	3	0	6	1328	106	0	28	7
4:30-4:45	144	30	10	4	3	0	8	1498	127	0	31	7
4:45-5:00	153	34	12	5	3	0	12	1639	147	0	36	7
5:00-5:15	171	36	20	5	3	0	13	1846	167	0	38	7
5:15-5:30	189	37	25	5	3	0	20	2015	197	0	40	7
5:30-5:45	208	42	41	5	3	0	21	2169	210	0	40	8
5:45-6:00	220	44	46	5	3	0	22	2289	230	0	41	8
6:00-6:15	233	47	49	5	3	0	22	2372	243	0	43	8
6:15-6:30	242	49	53	5	3	0	24	2456	254	0	44	8

CUMULATIVE VOLUME FIGURES

PERIOD	R3	S3	L3	TRR3	TRS3	TRL3	R4	S4	L4	TRR4	TRS4	TRL4
2:30-2:45	0	0	0	0	0	0	0	0	0	0	0	0
2:45-3:00	0	0	0	0	0	0	0	0	0	0	0	0
3:00-3:15	4	1	20	1	0	0	26	133	10	0	8	0
3:15-3:30	16	2	33	1	0	0	42	254	20	0	14	0
3:30-3:45	28	2	62	3	0	0	59	399	33	2	27	1
3:45-4:00	41	7	71	5	2	1	74	510	41	2	30	1
4:00-4:15	47	7	95	5	4	1	99	659	46	4	33	1
4:15-4:30	53	8	127	5	4	1	117	763	51	5	39	1
4:30-4:45	57	10	137	5	4	4	129	907	61	6	47	2
4:45-5:00	61	11	144	5	4	5	148	1079	67	7	51	2
5:00-5:15	76	15	176	5	4	5	171	1244	90	7	55	2
5:15-5:30	87	17	202	7	4	5	198	1418	115	7	58	2
5:30-5:45	112	20	220	7	4	5	226	1632	130	8	65	3
5:45-6:00	128	24	249	8	4	5	247	1771	143	8	67	3
6:00-6:15	147	32	281	8	4	5	253	1922	155	8	69	3
6:15-6:30	158	36	299	8	4	5	265	2045	180	8	72	3

ACTUAL TIME PERIOD VOLUME FIGURE

PERIOD	R1	S1	L1	TRR1	TRS1	TRL1	R2	S2	L2	TRR2	TRS2	TRL2
2:30-2:45	0	0	0	0	0	0	0	0	0	0	0	0
2:45-3:00	0	0	0	0	0	0	0	0	0	0	0	0
3:00-3:15	27	8	2	0	0	0	2	313	25	0	8	1
3:15-3:30	32	3	1	0	0	0	0	146	20	0	9	3
3:30-3:45	26	6	1	1	2	0	1	239	17	0	1	3
3:45-4:00	19	6	1	2	1	0	0	205	13	0	2	0
4:00-4:15	21	3	3	0	0	0	0	237	18	0	6	0
4:15-4:30	9	1	1	0	0	0	3	188	13	0	2	0
4:30-4:45	10	3	1	1	0	0	2	170	21	0	3	0
4:45-5:00	9	4	2	1	0	0	4	141	20	0	5	0
5:00-5:15	18	2	8	0	0	0	1	207	20	0	2	0
5:15-5:30	17	1	5	0	0	0	7	169	30	0	2	0
5:30-5:45	20	5	16	0	0	0	1	154	13	0	0	1
5:45-6:00	12	2	5	0	0	0	1	120	20	0	1	0
6:00-6:15	13	3	8	0	0	0	0	83	13	0	2	0

LOCATION NUMBER = [illegible]133
STREET NAME APPROACH #1= MINUTE
STREET NAME APPROACH #2= MARKET
STREET NAME APPROACH #3= MASS A
STREET NAME APPROACH #4= MARKET

COMMUNITY = LEXING
DATE COUNTED = 5/24/90
DATE ADJUSTED =
DATE ADJUSTED =
DATE ADJUSTED =
DATE ADJUSTED =

ACTUAL TIME PERIOD VOLUME FIGURE

PERIOD	R3	S3	L3	TRR3	TRS3	TRL3	R4	S4	L4	TRR4	TRS4	TRL4
2:30-2:45	0	0	0	0	0	0	0	0	0	0	0	0
2:45-3:00	0	0	0	0	0	0	0	0	0	0	0	0
3:00-3:15	4	1	20	1	0	0	26	133	10	0	8	0
3:15-3:30	12	1	13	0	0	0	16	121	10	0	6	0
3:30-3:45	12	0	29	2	0	0	17	145	13	2	13	1
3:45-4:00	13	5	9	2	2	1	15	111	8	0	3	0
4:00-4:15	6	0	24	0	2	0	25	149	5	2	3	0
4:15-4:30	6	1	32	0	0	0	19	104	5	1	6	0
4:30-4:45	4	2	10	0	0	3	12	144	10	1	8	1
4:45-5:00	4	1	7	0	0	1	19	172	6	1	4	0
5:00-5:15	15	5	32	0	0	0	23	165	23	0	4	0
5:15-5:30	11	3	26	2	0	0	27	174	25	0	3	0
5:30-5:45	25	1	18	0	0	0	28	214	15	1	7	1
5:45-6:00	16	4	29	1	0	0	21	139	13	0	2	0
6:00-6:15	19	8	32	0	0	0	6	151	12	0	2	0
6:15-6:30	11	4	18	0	0	0	12	123	25	0	3	0
TOTAL	153	36	299	8	4	5	265	2045	180	8	72	3

ACTUAL TIME PERIOD VOLUME FIGURE

PERIOD	ENTER	EXIT	ENTER	EXIT	ENTER	EXIT	ENTER	EXIT
2:30-2:45	0	0	0	0	0	0	0	0
2:45-3:00	0	0	0	0	0	0	0	0
3:00-3:15	37	13	347	148	26	50	177	368
3:15-3:30	36	11	178	140	25	42	153	200
3:30-3:45	36	15	261	173	43	47	191	296
3:45-4:00	29	15	220	130	32	35	137	238
4:00-4:15	27	7	261	161	32	48	184	288
4:15-4:30	11	9	206	117	39	33	134	231
4:30-4:45	15	15	196	157	19	37	176	197
4:45-5:00	16	11	170	192	13	44	202	164
5:00-5:15	28	29	230	192	52	45	215	259
5:15-5:30	23	35	208	195	42	58	229	214
5:30-5:45	41	18	169	262	44	48	266	192
5:45-6:00	19	18	142	163	50	43	175	162
6:00-6:15	19	20	93	175	59	22	171	130
6:15-6:30	15	31	98	141	33	25	163	112
TOTAL	352	247	2786	2336	510	587	2573	3051

LOCATION NUMBER = L-#3
STREET NAME APPROACH #1= 20 KILN BROOK
STREET NAME APPROACH #2= MCGUIRE RD
STREET NAME APPROACH #3= WESTVIEW ST
STREET NAME APPROACH #4= MCGUIRE RD

COMMUNITY = LEXINGTO
DATE COUNTED = 6/14/90
E' = = 7/3/90
E' = =
E' = =
E' = =

CUMULATIVE VOLUME FIGURES

PERIOD	R1	S1	L1	TRR1	TRS1	TRL1	R2	S2	L2	TRR2	TRS2	TRL2
6:30-6:45	0	0	0	0	0	0	0	0	0	0	0	0
6:45-7:00	0	0	0	0	0	0	0	116	20	0	5	0
7:00-7:15	2	0	0	0	0	0	4	275	41	0	9	1
7:15-7:30	2	0	0	0	0	0	9	426	79	0	11	1
7:30-7:45	2	0	0	0	0	0	14	604	105	0	13	1
7:45-8:00	2	1	0	0	0	0	18	815	136	0	16	2
8:00-8:15	2	1	0	0	0	0	28	1017	173	0	20	2
8:15-8:30	3	2	0	0	0	0	48	1190	213	0	21	2
8:30-8:45	4	4	1	0	0	0	62	1329	245	0	21	2
8:45-9:00	7	4	2	0	1	0	71	1433	268	0	22	2
9:00-9:15	8	4	2	0	1	0	80	1504	281	0	25	3
9:15-9:30	8	4	4	1	1	1	83	1585	295	0	28	3
9:30-9:45	9	4	4	1	1	1	87	1635	308	0	31	3

CUMULATIVE VOLUME FIGURES

PERIOD	R3	S3	L3	TRR3	TRS3	TRL3	R4	S4	L4	TRR4	TRS4	TRL4
6:30-6:45	0	0	0	0	0	0	0	0	0	0	0	0
6:45-7:00	57	0	2	0	0	0	0	29	3	0	0	0
7:00-7:15	121	1	3	0	0	0	3	68	6	0	2	0
7:15-7:30	211	3	3	0	0	0	8	115	8	0	7	0
7:30-7:45	294	5	4	1	0	1	10	195	15	1	10	0
7:45-8:00	402	7	5	1	0	1	10	271	23	1	12	0
8:00-8:15	499	11	5	1	1	2	13	332	34	1	15	1
8:15-8:30	560	18	5	1	1	2	16	381	64	1	19	1
8:30-8:45	614	27	7	2	1	2	16	435	86	1	20	2
8:45-9:00	664	40	8	2	2	2	17	478	113	1	20	3
9:00-9:15	714	51	11	2	3	2	21	522	132	1	24	3
9:15-9:30	750	64	13	2	3	2	21	559	146	1	24	3
9:30-9:45	774	73	13	2	3	2	22	596	156	1	28	3

ACTUAL TIME PERIOD VOLUME FIGURE

PERIOD	R1	S1	L1	TRR1	TRS1	TRL1	R2	S2	L2	TRR2	TRS2	TRL2
6:30-6:45	0	0	0	0	0	0	0	0	0	0	0	0
6:45-7:00	0	0	0	0	0	0	0	116	20	0	5	0
7:00-7:15	2	0	0	0	0	0	4	159	21	0	4	1
7:15-7:30	0	0	0	0	0	0	5	151	38	0	2	0
7:30-7:45	0	0	0	0	0	0	5	178	26	0	2	0
7:45-8:00	0	1	0	0	0	0	4	211	31	0	3	1
8:00-8:15	0	0	0	0	0	0	10	202	37	0	4	0
8:15-8:30	1	1	0	0	0	0	20	173	40	0	1	0
8:30-8:45	1	2	1	0	0	0	14	139	32	0	0	0
8:45-9:00	3	0	1	0	1	0	9	104	23	0	1	0
9:00-9:15	1	0	0	0	0	0	9	71	13	0	3	1
9:15-9:30	0	0	2	1	0	1	3	81	14	0	3	0
9:30-9:45	1	0	0	0	0	0	4	50	13	0	3	0
TOTAL	9	4	4	1	1	1	87	1635	308	0	31	3

LOCATION NUMBER = L-#3
STREET NAME APPROACH #1= 20 KILN BROOK
STREET NAME APPROACH #2= MCGUIRE RO
STREET NAME APPROACH #3= WESTVIEW ST
STREET NAME APPROACH #4= MCGUIRE RO

COMMUNITY = LEXINGTO
DATE COUNTED = 6/14/90
E' = = 7/3/90
E' = =
E' = =
E' = =

ACTUAL TIME PERIOD VOLUME FIGURE

PERIOD	R3	S3	L3	TRR3	TRS3	TRL3	R4	S4	L4	TRR4	TRS4	TRL4
6:30-6:45	0	0	0	0	0	0	0	0	0	0	0	0
6:45-7:00	57	0	2	0	0	0	0	29	3	0	0	0
7:00-7:15	64	1	1	0	0	0	3	39	3	0	2	0
7:15-7:30	90	2	0	0	0	0	5	47	2	0	5	0
7:30-7:45	83	2	1	1	0	1	2	80	7	1	3	0
7:45-8:00	108	2	1	0	0	0	0	76	8	0	2	0
8:00-8:15	97	4	0	0	1	1	3	61	11	0	3	1
8:15-8:30	61	7	0	0	0	0	3	49	30	0	4	0
8:30-8:45	54	9	2	1	0	0	0	54	22	0	1	1
8:45-9:00	50	13	1	0	1	0	1	43	27	0	0	1
9:00-9:15	50	11	3	0	1	0	4	44	19	0	4	0
9:15-9:30	36	13	2	0	0	0	0	37	14	0	0	0
9:30-9:45	24	9	0	0	0	0	1	37	10	0	4	0
TOTAL	774	73	13	2	3	2	22	596	156	1	28	3

ACTUAL TIME PERIOD VOLUME FIGURE

PERIOD	ENTER 1	EXIT	ENTER 2	EXIT	ENTER 3	EXIT	ENTER 4	EXIT
6:30-6:45	0	0	0	0	0	0	0	0
6:45-7:00	0	3	141	86	59	20	32	123
7:00-7:15	2	8	189	105	66	25	47	166
7:15-7:30	0	9	196	142	92	43	59	153
7:30-7:45	0	14	211	167	88	29	93	182
7:45-8:00	1	14	250	186	111	33	86	215
8:00-8:15	0	27	253	161	103	40	79	207
8:15-8:30	2	57	234	114	68	44	86	175
8:30-8:45	4	46	185	111	66	34	78	142
8:45-9:00	5	51	137	94	65	25	72	109
9:00-9:15	1	40	97	98	65	18	71	78
9:15-9:30	4	30	101	76	51	14	51	87
9:30-9:45	1	23	70	65	33	14	52	54
TOTAL	20	322	2064	1405	867	339	806	1691

	APPROACH 1				APPROACH 2			
PERIOD	VOL	PHF	VOL T	% TKS	VOL	PHF	VOL T	% TKS
6:30-7:30	2	0.25	0	0.00	526	0.67	12	2.28
6:45-7:45	2	0.25	0	0.00	737	0.87	14	1.90
7:00-8:00	3	0.38	0	0.00	846	0.85	13	1.54
7:15-8:15	1	0.25	0	0.00	910	0.90	12	1.32
7:30-8:30	3	0.38	0	0.00	948	0.94	11	1.16
7:45-8:45	7	0.44	0	0.00	922	0.91	9	0.98
8:00-9:00	11	0.55	1	9.09	809	0.80	6	0.74
8:15-9:15	12	0.60	1	8.33	653	0.70	6	0.92
8:30-9:30	14	0.70	3	21.43	520	0.70	8	1.54
8:45-9:45	11	0.55	3	27.27	405	0.74	11	2.72

LOCATION NUMBER = L-#3
STREET NAME APPROACH #1= 20 KILN BROOK
STREET NAME APPROACH #2= MCGUIRE RD
STREET NAME APPROACH #3= WESTVIEW ST
STREET NAME APPROACH #4= MCGUIRE RD

COMMUNITY = LEXINGTO
DATE COUNTED = 6/14/90
E' = = 7/3/90
E' = =
E' = =
E' = =

	APPROACH 3				APPROACH 4				INTERSECTION APP. PEAK HR. VOLUME	
PERIOD	VOL	PHF	VOL T	% TKS	VOL	PHF	VOL T	% TKS	/PEAK HOUR	1665
6:30-7:30	217	0.59	0	0.00	138	0.58	7	5.07	883	0.64
6:45-7:45	305	0.83	2	0.66	231	0.62	11	4.76	1275	0.81
7:00-8:00	357	0.80	2	0.56	285	0.77	13	4.56	1491	0.83
7:15-8:15	394	0.89	4	1.02	317	0.85	15	4.73	1622	0.91
7:30-8:30	370	0.83	4	1.08	344	0.92	14	4.07	1665	0.93
7:45-8:45	348	0.78	3	0.86	329	0.96	12	3.65	1606	0.90
8:00-9:00	302	0.73	4	1.32	315	0.92	11	3.49	1437	0.83
8:15-9:15	264	0.97	3	1.14	307	0.89	11	3.58	1236	0.79
8:30-9:30	247	0.94	3	1.21	272	0.87	7	2.57	1053	0.79
8:45-9:45	214	0.82	2	0.93	246	0.85	9	3.66	876	0.78

	APPRO. 1			APPRO. 2			APPRO 3.			APPRO. 4		
PERIOD	R	S	L	R	S	L	R	S	L	R	S	L
6:30-7:30	2	0	0	9	437	80	211	3	3	8	122	8
6:45-7:45	2	0	0	14	617	106	295	5	5	11	205	15
7:00-8:00	2	1	0	18	710	118	346	7	4	11	254	20
7:15-8:15	0	1	0	24	753	133	379	11	4	11	277	29
7:30-8:30	1	2	0	39	774	135	350	16	4	9	278	57
7:45-8:45	2	4	1	48	733	141	321	23	4	6	250	73
8:00-9:00	5	4	2	53	624	132	263	35	4	7	215	93
8:15-9:15	6	4	2	52	492	109	216	42	6	8	199	100
8:30-9:30	6	3	5	35	402	83	191	48	8	5	183	84
8:45-9:45	6	1	4	25	316	64	160	48	6	6	169	71
TOTAL	10	5	5	87	1666	311	776	76	15	23	624	159

	EXIT	VOL.ENTER APP 1	EXIT	VOL.ENTER APP 2	EXIT	VOL.ENTER APP 3	EXIT	VOL.ENTER APP 4
PERIOD								
6:30-7:30	20	2	333	526	88	217	442	138
6:45-7:45	34	2	500	737	117	305	624	231
7:00-8:00	45	3	600	846	130	357	716	285
7:15-8:15	64	1	656	910	145	394	757	317
7:30-8:30	112	3	628	948	146	370	779	344
7:45-8:45	144	7	572	922	151	348	739	329
8:00-9:00	181	11	480	809	143	302	633	315
8:15-9:15	194	12	417	653	121	264	504	307
8:30-9:30	167	14	379	520	91	247	416	272
8:45-9:45	144	11	333	405	71	214	328	246
TOTAL	322	20	1405	2064	339	867	1691	806

LOCATION NUMBER = L-#3
STREET NAME APPROACH #1= 20 KILN BROOK
STREET NAME APPROACH #2= MCGUIRE RD
STREET NAME APPROACH #3= WESTVIEW ST
STREET NAME APPROACH #4= MCGUIRE RD

COMMUNITY = LEXINGTO
DATE COUNTED = 6/14/90
E' = = 7/3/90
E' = =
E' = =
E' = =

CUMULATIVE VOLUME FIGURES

PERIOD	R1	S1	L1	TRR1	TRS1	TRL1	R2	S2	L2	TRR2	TRS2	TRL2
11:00-11:15	3	0	0	0	1	0	0	33	23	0	4	0
11:15-11:30	5	1	2	2	2	0	3	86	38	0	10	1
11:30-11:45	9	2	3	2	2	0	4	161	63	0	14	1
11:45-12:00	14	5	5	3	2	0	5	239	89	0	15	1
12:00-12:15	18	6	17	3	2	0	8	358	118	0	16	1
12:15-12:30	19	9	18	4	2	0	11	461	140	0	17	2
12:30-12:45	24	12	25	4	2	0	15	566	164	0	17	3
12:45-1:00	33	14	25	4	2	0	20	671	186	0	18	4
1:00-1:15	38	21	39	4	2	0	27	733	210	0	19	4
1:15-1:30	43	22	46	4	2	0	35	810	226	0	20	5
N/A												
N/A												
N/A												

CUMULATIVE VOLUME FIGURES

PERIOD	R3	S3	L3	TRR3	TRS3	TRL3	R4	S4	L4	TRR4	TRS4	TRL4
11:00-11:15	23	1	0	0	0	0	6	70	6	0	2	1
11:15-11:30	40	1	0	0	0	0	13	163	6	0	3	2
11:30-11:45	57	1	1	0	0	0	17	294	7	0	6	2
11:45-12:00	84	1	4	0	1	1	20	416	9	0	9	2
12:00-12:15	120	1	7	0	1	1	23	520	11	0	10	3
12:15-12:30	150	4	7	0	1	2	24	659	13	0	13	3
12:30-12:45	186	4	8	0	1	2	24	747	18	0	14	3
12:45-1:00	213	8	11	1	1	2	26	817	22	0	17	3
1:00-1:15	244	9	15	1	1	2	28	877	30	0	20	3
1:15-1:30	280	11	17	1	2	2	28	945	38	1	23	3
N/A												
N/A												
N/A												

ACTUAL TIME PERIOD VOLUME FIGURE

PERIOD	R1	S1	L1	TRR1	TRS1	TRL1	R2	S2	L2	TRR2	TRS2	TRL2
11:00-11:15	3	0	0	0	1	0	0	33	23	0	4	0
11:15-11:30	2	1	2	2	1	0	3	53	15	0	6	1
11:30-11:45	4	1	1	0	0	0	1	75	25	0	4	0
11:45-12:00	5	3	2	1	0	0	1	78	26	0	1	0
12:00-12:15	4	1	12	0	0	0	3	119	29	0	1	0
12:15-12:30	1	3	1	1	0	0	3	103	22	0	1	1
12:30-12:45	5	3	7	0	0	0	4	105	24	0	0	1
12:45-1:00	9	2	0	0	0	0	5	105	22	0	1	1
1:00-1:15	5	7	14	0	0	0	7	62	24	0	1	0
1:15-1:30	5	1	7	0	0	0	8	77	16	0	1	1
N/A												
N/A												
N/A												
TOTAL	43	22	46	4	2	0	35	810	226	0	20	5

LOCATION NUMBER = L-#3
STREET NAME APPROACH #1= 20 KILN BROOK
STREET NAME APPROACH #2= MCGUIRE RD
STREET NAME APPROACH #3= WESTVIEW ST
STREET NAME APPROACH #4= MCGUIRE RD

COMMUNITY = LEXINGTO
DATE COUNTED = 6/14/90
E' = = 7/3/90
E' = =
E' = =
E' = =

ACTUAL TIME PERIOD VOLUME FIGURE

PERIOD	R3	S3	L3	TRR3	TRS3	TRL3	R4	S4	L4	TRR4	TRS4	TRL4
11:00-11:15	23	1	0	0	0	0	6	70	6	0	2	1
11:15-11:30	17	0	0	0	0	0	7	93	0	0	1	1
11:30-11:45	17	0	1	0	0	0	4	131	1	0	3	0
11:45-12:00	27	0	3	0	1	1	3	122	2	0	3	0
12:00-12:15	36	0	3	0	0	0	3	104	2	0	1	1
12:15-12:30	30	3	0	0	0	1	1	139	2	0	3	0
12:30-12:45	36	0	1	0	0	0	0	88	5	0	1	0
12:45-1:00	27	4	3	1	0	0	2	70	4	0	3	0
1:00-1:15	31	1	4	0	0	0	2	60	8	0	3	0
1:15-1:30	36	2	2	0	1	0	0	68	8	1	3	0
N/A												
N/A												
N/A												
TOTAL	280	11	17	1	2	2	28	945	38	1	23	3

ACTUAL TIME PERIOD VOLUME FIGURE

PERIOD	ENTER 1	EXIT	ENTER 2	EXIT	ENTER 3	EXIT	ENTER 4	EXIT
11:00-11:15	4	8	60	95	24	30	85	40
11:15-11:30	8	4	78	113	17	25	102	63
11:30-11:45	6	2	105	152	18	30	139	84
11:45-12:00	11	4	106	154	32	32	130	89
12:00-12:15	17	6	152	153	39	33	111	127
12:15-12:30	6	8	130	173	34	27	145	107
12:30-12:45	15	9	134	132	37	28	94	111
12:45-1:00	11	13	134	101	35	27	79	118
1:00-1:15	26	16	94	108	36	33	73	72
1:15-1:30	13	19	103	114	41	19	80	85
N/A	0	0	0	0	0	0	0	0
N/A	0	0	0	0	0	0	0	0
N/A	0	0	0	0	0	0	0	0
TOTAL	117	89	1096	1295	313	284	1038	896

	APPROACH 1				APPROACH 2			
PERIOD	VOL	PHF	VOL T	% TKS	VOL	PHF	VOL T	% TKS
11:00-12:00	29	0.66	5	17.24	349	0.82	16	4.58
11:15-12:15	42	0.62	4	9.52	441	0.73	13	2.95
11:30-12:30	40	0.59	2	5.00	493	0.81	8	1.62
11:45-12:45	49	0.72	2	4.08	522	0.86	5	0.96
12:00-1:00	49	0.72	1	2.04	550	0.90	6	1.09
12:15-1:15	58	0.56	1	1.72	492	0.92	6	1.22
12:30-1:30	65	0.63	0	0.00	465	0.87	6	1.29
N/A								
N/A								
N/A								

LOCATION NUMBER = L-#3
STREET NAME APPROACH #1= 20 KILN BROOK
STREET NAME APPROACH #2= MCGUIRE RD
STREET NAME APPROACH #3= WESTVIEW ST
STREET NAME APPROACH #4= MCGUIRE RO

COMMUNITY = LEXINGTO
DATE COUNTEO = 6/14/90
E' = = 7/3/90
E' = =
E' = =
E' = =

	APPROACH 3				APPROACH 4				INTERSECTION APP. PEAK HR. VOLUME	
PERIOD	VOL	PHF	VOL T	% TKS	VOL	PHF	VOL T	% TKS	/PEAK HOUR	1193
11:00-12:00	91	0.71	2	2.20	456	0.82	11	2.41	925	0.83
11:15-12:15	106	0.68	2	1.89	482	0.87	10	2.07	1071	0.84
11:30-12:30	123	0.79	3	2.44	525	0.91	11	2.10	1181	0.93
11:45-12:45	142	0.91	3	2.11	480	0.83	9	1.88	1193	0.93
12:00-1:00	145	0.93	2	1.38	429	0.74	9	2.10	1173	0.92
12:15-1:15	142	0.96	2	1.41	391	0.67	10	2.56	1083	0.86
12:30-1:30	149	0.91	2	1.34	326	0.87	11	3.37	1005	0.90
N/A									0	0.00
N/A									0	0.00
N/A									0	0.00

	APPRO. 1			APPRO. 2			APPRO 3.			APPRO. 4		
PERIOD	R	S	L	R	S	L	R	S	L	R	S	L
11:00-12:00	17	7	5	5	254	90	84	2	5	20	425	11
11:15-12:15	18	7	17	8	337	96	97	1	8	17	458	7
11:30-12:30	16	8	16	8	382	103	110	4	9	11	506	8
11:45-12:45	17	10	22	11	408	103	129	4	9	7	461	12
12:00-1:00	20	9	20	15	435	100	130	7	8	6	409	14
12:15-1:15	21	15	22	19	378	95	125	8	9	5	367	19
12:30-1:30	24	13	28	24	352	89	131	8	10	5	296	25
N/A												
N/A												
N/A												
TOTAL	47	24	46	35	830	231	281	13	19	29	968	41

	EXIT	VOL.ENTER APP 1	EXIT	VOL.ENTER APP 2	EXIT	VOL.ENTER APP 3	EXIT	VOL.ENTER APP 4
PERIOD								
11:00-12:00	18	29	514	349	117	91	276	456
11:15-12:15	16	42	572	441	120	106	363	482
11:30-12:30	20	40	632	493	122	123	407	525
11:45-12:45	27	49	612	522	120	142	434	480
12:00-1:00	36	49	559	550	115	145	463	429
12:15-1:15	46	58	514	492	115	142	408	391
12:30-1:30	57	65	455	465	107	149	386	326
TOTAL	89	117	1295	1096	284	313	896	1038

LOCATION NUMBER = L-#3
STREET NAME APPROACH #1= 20KILN BROOK
STREET NAME APPROACH #2= MCGUIRE RD
STREET NAME APPROACH #3= WESTVIEW ST
STREET NAME APPROACH #4= MCGUIRE RD

COMMUNITY = LEXINGTO
DATE COUNTED = 6/14/90
E' = = 7/3/90
E' = =
E' = =
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CUMULATIVE VOLUME FIGURES

PERIOD	R1	S1	L1	TRR1	TRS1	TRL1	R2	S2	L2	TRR2	TRS2	TRL2
2:30-2:45	0	0	0	0	0	0	0	0	0	0	0	0
2:45-3:00	0	0	0	0	0	0	0	0	0	0	0	0
3:00-3:15	2	2	4	0	1	0	3	48	32	0	0	0
3:15-3:30	4	2	5	0	1	0	5	93	60	0	2	0
3:30-3:45	6	3	5	0	1	0	6	171	126	0	4	1
3:45-4:00	7	6	5	0	1	0	6	220	176	0	4	2
4:00-4:15	15	7	14	0	1	0	6	276	236	0	5	2
4:15-4:30	19	10	16	0	1	0	6	331	277	0	5	3
4:30-4:45	32	11	19	0	1	0	6	424	347	0	5	3
4:45-5:00	45	15	23	0	2	0	6	522	410	0	5	3
5:00-5:15	79	23	49	0	2	0	7	598	449	0	5	4
5:15-5:30	96	31	54	0	3	0	7	678	493	0	6	5
5:30-5:45	113	36	61	0	3	0	9	737	546	0	6	5
5:45-6:00	119	39	73	0	3	0	10	788	590	0	6	5
6:00-6:15	135	53	90	0	3	0	11	830	614	0	7	6
6:15-6:30	139	54	92	0	3	0	11	882	644	0	7	6

CUMULATIVE VOLUME FIGURES

PERIOD	R3	S3	L3	TRR3	TRS3	TRL3	R4	S4	L4	TRR4	TRS4	TRL4
2:30-2:45	0	0	0	0	0	0	0	0	0	0	0	0
2:45-3:00	0	0	0	0	0	0	0	0	0	0	0	0
3:00-3:15	15	0	5	0	0	1	0	79	0	0	4	1
3:15-3:30	38	0	6	0	0	1	0	168	1	1	6	1
3:30-3:45	67	0	8	0	0	1	2	294	1	1	11	1
3:45-4:00	89	1	10	2	0	1	3	418	3	1	13	1
4:00-4:15	111	2	10	3	0	1	6	601	5	1	14	1
4:15-4:30	144	3	10	5	0	1	7	816	5	1	17	1
4:30-4:45	173	3	11	5	0	1	13	1075	6	1	20	2
4:45-5:00	221	5	12	6	0	2	13	1277	9	1	22	2
5:00-5:15	264	5	15	6	0	2	17	1519	13	1	24	2
5:15-5:30	308	6	18	6	0	2	17	1692	15	1	26	3
5:30-5:45	346	7	21	9	0	2	18	1833	17	1	29	3
5:45-6:00	371	7	24	9	0	2	19	1974	17	1	29	3
6:00-6:15	403	10	30	9	0	2	19	2054	17	1	32	3
6:15-6:30	424	10	31	10	0	2	19	2128	17	1	34	3

ACTUAL TIME PERIOD VOLUME FIGURE

PERIOD	R1	S1	L1	TRR1	TRS1	TRL1	R2	S2	L2	TRR2	TRS2	TRL2
2:30-2:45	0	0	0	0	0	0	0	0	0	0	0	0
2:45-3:00	0	0	0	0	0	0	0	0	0	0	0	0
3:00-3:15	2	2	4	0	1	0	3	48	32	0	0	0
3:15-3:30	2	0	1	0	0	0	2	45	28	0	2	0
3:30-3:45	2	1	0	0	0	0	1	78	66	0	2	1
3:45-4:00	1	3	0	0	0	0	0	49	50	0	0	1
4:00-4:15	8	1	9	0	0	0	0	56	60	0	1	0
4:15-4:30	4	3	2	0	0	0	0	55	41	0	0	1
4:30-4:45	13	1	3	0	0	0	0	93	70	0	0	0
4:45-5:00	13	4	4	0	1	0	0	98	63	0	0	0
5:00-5:15	34	8	26	0	0	0	1	76	39	0	0	1
5:15-5:30	17	8	5	0	1	0	0	80	44	0	1	1
5:30-5:45	17	5	7	0	0	0	2	59	53	0	0	0
5:45-6:00	6	3	12	0	0	0	1	51	44	0	0	0
6:00-6:15	16	14	17	0	0	0	1	42	24	0	1	1

LOCATION NUMBER = L-#3
STREET NAME APPROACH #1= 20KILN BROOK
STREET NAME APPROACH #2= MCGUIRE RD
STREET NAME APPROACH #3= WESTVIEW ST
STREET NAME APPROACH #4= MCGUIRE RD

COMMUNITY = LEXINGTO
DATE COUNTED = 6/14/90
E' = = 7/3/90
E' = =
E' = =
E' = =

ACTUAL TIME PERIOD VOLUME FIGURE

PERIOD	R3	S3	L3	TRR3	TRS3	TRL3	R4	S4	L4	TRR4	TRS4	TRL4
2:30-2:45	0	0	0	0	0	0	0	0	0	0	0	0
2:45-3:00	0	0	0	0	0	0	0	0	0	0	0	0
3:00-3:15	15	0	5	0	0	1	0	79	0	0	4	1
3:15-3:30	23	0	1	0	0	0	0	89	1	1	2	0
3:30-3:45	29	0	2	0	0	0	2	126	0	0	5	0
3:45-4:00	22	1	2	2	0	0	1	124	2	0	2	0
4:00-4:15	22	1	0	1	0	0	3	183	2	0	1	0
4:15-4:30	33	1	0	2	0	0	1	215	0	0	3	0
4:30-4:45	29	0	1	0	0	0	6	259	1	0	3	1
4:45-5:00	48	2	1	1	0	1	0	202	3	0	2	0
5:00-5:15	43	0	3	0	0	0	4	242	4	0	2	0
5:15-5:30	44	1	3	0	0	0	0	173	2	0	2	1
5:30-5:45	38	1	3	3	0	0	1	141	2	0	3	0
5:45-6:00	25	0	3	0	0	0	1	141	0	0	0	0
6:00-6:15	32	3	6	0	0	0	0	80	0	0	3	0
6:15-6:30	21	0	1	1	0	0	0	74	0	0	2	0
TOTAL	424	10	31	10	0	2	19	2128	17	1	34	3

ACTUAL TIME PERIOD VOLUME FIGURE

PERIOD	ENTER 1	EXIT	ENTER 2	EXIT	ENTER 3	EXIT	ENTER 4	EXIT
2:30-2:45	0	0	0	0	0	0	0	0
2:45-3:00	0	0	0	0	0	0	0	0
3:00-3:15	9	4	83	102	21	35	84	56
3:15-3:30	3	3	77	115	24	29	93	50
3:30-3:45	3	1	148	160	31	70	133	84
3:45-4:00	4	3	100	150	27	55	129	52
4:00-4:15	18	3	117	216	24	64	189	65
4:15-4:30	9	1	97	255	36	46	219	59
4:30-4:45	17	2	163	294	30	77	270	107
4:45-5:00	22	5	161	257	53	68	207	113
5:00-5:15	68	5	117	313	46	52	252	113
5:15-5:30	31	4	126	224	48	54	178	101
5:30-5:45	29	5	114	192	45	59	147	79
5:45-6:00	21	1	96	178	28	48	142	60
6:00-6:15	47	4	69	132	41	39	83	65
6:15-6:30	7	0	82	100	23	31	76	57
TOTAL	288	41	1550	2688	477	727	2202	1061

	APPROACH 1				APPROACH 2			
PERIOD	VOL	PHF	VOL T	% TKS	VOL	PHF	VOL T	% TKS
2:30-3:30	12	0.33	1	8.33	160	0.48	2	1.25
2:45-3:45	15	0.42	1	6.67	308	0.52	5	1.62
3:00-4:00	19	0.53	1	5.26	408	0.69	6	1.47
3:15-4:15	28	0.39	0	0.00	442	0.75	7	1.58
3:30-4:30	34	0.47	0	0.00	462	0.78	6	1.30
3:45-4:45	48	0.67	0	0.00	477	0.73	3	0.63
4:00-5:00	66	0.75	1	1.52	538	0.83	2	0.37
4:15-5:15	116	0.43	1	0.86	538	0.83	2	0.37
4:30-5:30	138	0.51	2	1.45	567	0.87	3	0.53
4:45-5:45	150	0.55	2	1.33	518	0.80	3	0.58
5:00-6:00	149	0.55	1	0.67	453	0.90	3	0.66
5:15-6:15	128	0.68	1	0.78	405	0.80	4	0.99

LOCATION NUMBER = L-#3
STREET NAME APPROACH #1= 20KILN BROOK
STREET NAME APPROACH #2= MCGUIRE RD
STREET NAME APPROACH #3= WESTVIEW ST
STREET NAME APPROACH #4= MCGUIRE RD

COMMUNITY = LEXINGTO
DATE COUNTED = 6/14/90
E' = = 7/3/90
E' = =
E' = =
E' = =

	APPROACH 3				APPROACH 4				INTERSECTION APP. PEAK HR. VOLUME	
PERIOD	VOL	PHF	VOL T	% TKS	VOL	PHF	VOL T	% TKS	/PEAK HOUR	1789
2:30-3:30	45	0.47	1	2.22	177	0.48	8	4.52	394	0.50
2:45-3:45	76	0.61	1	1.32	310	0.58	13	4.19	709	0.56
3:00-4:00	103	0.83	3	2.91	439	0.83	15	3.42	969	0.77
3:15-4:15	106	0.85	3	2.83	544	0.72	11	2.02	1120	0.80
3:30-4:30	118	0.82	5	4.24	670	0.76	11	1.64	1284	0.89
3:45-4:45	117	0.81	5	4.27	807	0.75	10	1.24	1449	0.75
4:00-5:00	143	0.67	5	3.50	885	0.82	10	1.13	1632	0.85
4:15-5:15	165	0.78	4	2.42	948	0.88	11	1.16	1767	0.91
4:30-5:30	177	0.83	2	1.13	907	0.84	11	1.21	1789	0.93
4:45-5:45	192	0.91	5	2.60	784	0.78	10	1.28	1644	0.85
5:00-6:00	167	0.87	3	1.80	719	0.71	8	1.11	1488	0.77
5:15-6:15	162	0.84	3	1.85	550	0.77	9	1.64	1245	0.81
5:30-6:30	137	0.76	4	2.92	448	0.76	8	1.79	1050	0.78

	APPRO. 1			APPRO. 2			APPRO 3.			APPRO. 4		
PERIOD	R	S	L	R	S	L	R	S	L	R	S	L
2:30-3:30	4	3	5	5	95	60	38	0	7	1	174	2
2:45-3:45	6	4	5	6	175	127	67	0	9	3	305	2
3:00-4:00	7	7	5	6	224	178	91	1	11	4	431	4
3:15-4:15	13	5	10	3	233	206	99	2	5	7	532	5
3:30-4:30	15	8	11	1	241	220	111	3	4	7	659	4
3:45-4:45	26	8	14	0	254	223	111	3	3	11	790	6
4:00-5:00	38	10	18	0	303	235	136	4	3	10	868	7
4:15-5:15	64	17	35	1	322	215	156	3	6	11	928	9
4:30-5:30	77	23	38	1	348	218	165	3	9	10	885	12
4:45-5:45	81	27	42	3	314	201	177	4	11	5	767	12
5:00-6:00	74	25	50	4	267	182	153	2	12	6	704	9
5:15-6:15	56	31	41	4	234	167	142	5	15	2	543	5
5:30-6:30	43	23	38	4	205	152	120	4	13	2	444	2
TOTAL	139	57	92	11	889	650	434	10	33	20	2162	20

	EXIT	VOL.ENTER APP 1	EXIT	VOL.ENTER APP 2	EXIT	VOL.ENTER APP 3	EXIT	VOL.ENTER APP 4
PERIOD								
2:30-3:30	7	12	217	160	64	45	106	177
2:45-3:45	8	15	377	308	134	76	190	310
3:00-4:00	11	19	527	408	189	103	242	439
3:15-4:15	10	28	641	442	218	106	251	544
3:30-4:30	8	34	781	462	235	118	260	670
3:45-4:45	9	48	915	477	242	117	283	807
4:00-5:00	11	66	1022	538	255	143	344	885
4:15-5:15	13	116	1119	538	243	165	392	948
4:30-5:30	16	138	1088	567	251	177	434	907
4:45-5:45	19	150	986	518	233	192	406	784
5:00-6:00	15	149	907	453	213	167	353	719
5:15-6:15	14	128	726	405	200	162	305	550
5:30-6:30	10	104	602	361	177	137	261	448
TOTAL	41	288	2688	1550	727	477	1061	2202

LOCATION NUMBER = RD-28
STREET NAME APPROACH #1= MAGUIRE RD
STREET NAME APPROACH #2= HARTWELL A
STREET NAME APPROACH #3= DUMP DRWY
STREET NAME APPROACH #4= HARTWELL A

COMMUNITY = LEXINGTON
DATE COUNTED = 5/24/90
E' = = 7/11/90
E' = =
E' = =
E' = =

CUMULATIVE VOLUME FIGURES

PERIOD	R1	S1	L1	TRR1	TRS1	TRL1	R2	S2	L2	TRR2	TRS2	TRL2
6:30-6:45			0			0	0	0	0	0	0	0
6:45-7:00			15			1	60	250	0	1	4	0
7:00-7:15			32			2	124	516	0	3	8	0
7:15-7:30			45			3	182	806	0	4	12	0
7:30-7:45			63			5	289	1093	0	7	15	2
7:45-8:00			96			8	360	1335	0	9	16	2
8:00-8:15			126			10	431	1592	0	11	27	2
8:15-8:30			157			10	482	1865	0	17	33	3
8:30-8:45			179			13	537	2107	0	20	38	3
8:45-9:00			200			14	593	2310	0	22	42	3
9:00-9:15			220			15	632	2452	0	25	49	3
9:15-9:30			238			15	667	2567	0	27	58	4
9:30-9:45			243			15	686	2681	0	30	62	5

CUMULATIVE VOLUME FIGURES

PERIOD	R3	S3	L3	TRR3	TRS3	TRL3	R4	S4	L4	TRR4	TRS4	TRL4
6:30-6:45	0	0		0	0							
6:45-7:00	0	0		0	0							
7:00-7:15	0	0		0	0							
7:15-7:30	0	0		0	0							
7:30-7:45	0	0		1	0							
7:45-8:00	0	0		1	0							
8:00-8:15	0	0		1	0							
8:15-8:30	0	0		1	0							
8:30-8:45	0	0		1	0							
8:45-9:00	0	0		1	0							
9:00-9:15	0	0		2	0							
9:15-9:30	0	0		2	0							
9:30-9:45	0	0		2	0							

ACTUAL TIME PERIOD VOLUME FIGURE

PERIOD	R1	S1	L1	TRR1	TRS1	TRL1	R2	S2	L2	TRR2	TRS2	TRL2
6:30-6:45			0			0	0	0	0	0	0	0
6:45-7:00	0	0	15	0	0	1	60	250	0	1	4	0
7:00-7:15	0	0	17	0	0	1	64	266	0	2	4	0
7:15-7:30	0	0	13	0	0	1	58	290	0	1	4	0
7:30-7:45	0	0	18	0	0	2	107	287	0	3	3	2
7:45-8:00	0	0	33	0	0	3	71	242	0	2	1	0
8:00-8:15	0	0	30	0	0	2	71	257	0	2	11	0
8:15-8:30	0	0	31	0	0	0	51	273	0	6	6	1
8:30-8:45	0	0	22	0	0	3	55	242	0	3	5	0
8:45-9:00	0	0	21	0	0	1	56	203	0	2	4	0
9:00-9:15	0	0	20	0	0	1	39	142	0	3	7	0
9:15-9:30	0	0	18	0	0	0	35	115	0	2	9	1
9:30-9:45	0	0	5	0	0	0	19	114	0	3	4	1
TOTAL	0	0	243	0	0	15	686	2681	0	30	62	5

LOCATION NUMBER = 80-29
STREET NAME APPROACH #1= MAGUIRE RD
STREET NAME APPROACH #2= HARTWELL A
STREET NAME APPROACH #3= DUMP DRWY
STREET NAME APPROACH #4= HARTWELL A

COMMUNITY = LEXINGTON
DATE COUNTED = 5/24/90
E' = = 7/11/90
E' = =
E' = =
E' = =

ACTUAL TIME PERIOD VOLUME FIGURE

PERIOD	R3	S3	L3	TRR3	TRS3	TRL3	R4	S4	L4	TRR4	TRS4	TRL4
6:30-6:45	0	0		0	0							
6:45-7:00	0	0	0	0	0	0	0	0	0	0	0	0
7:00-7:15	0	0	0	0	0	0	0	0	0	0	0	0
7:15-7:30	0	0	0	0	0	0	0	0	0	0	0	0
7:30-7:45	0	0	0	1	0	0	0	0	0	0	0	0
7:45-8:00	0	0	0	0	0	0	0	0	0	0	0	0
8:00-8:15	0	0	0	0	0	0	0	0	0	0	0	0
8:15-8:30	0	0	0	0	0	0	0	0	0	0	0	0
8:30-8:45	0	0	0	0	0	0	0	0	0	0	0	0
8:45-9:00	0	0	0	0	0	0	0	0	0	0	0	0
9:00-9:15	0	0	0	1	0	0	0	0	0	0	0	0
9:15-9:30	0	0	0	0	0	0	0	0	0	0	0	0
9:30-9:45	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	0	0	0	2	0	0	0	0	0	0	0	0

ACTUAL TIME PERIOD VOLUME FIGURE

PERIOD	ENTER 1	EXIT	ENTER 2	EXIT	ENTER 3	EXIT	ENTER 4	EXIT
6:30-6:45	0	0	0	0	0	0	0	0
6:45-7:00	16	61	315	16	0	0	0	254
7:00-7:15	18	66	336	18	0	0	0	270
7:15-7:30	14	59	353	14	0	0	0	294
7:30-7:45	20	110	402	21	1	2	0	290
7:45-8:00	36	73	316	36	0	0	0	243
8:00-8:15	32	73	341	32	0	0	0	268
8:15-8:30	31	57	337	31	0	1	0	279
8:30-8:45	25	53	305	25	0	0	0	247
8:45-9:00	22	58	265	22	0	0	0	207
9:00-9:15	21	42	191	22	1	0	0	149
9:15-9:30	18	37	162	18	0	1	0	124
9:30-9:45	5	22	141	5	0	1	0	118
TOTAL	258	716	3464	260	2	5	0	2743

	APPROACH 1				APPROACH 2			
PERIOD	VOL	PHF	VOL T	% TKS	VOL	PHF	VOL T	% TKS
6:30-7:30	48	0.67	3	6.25	1004	0.71	16	1.59
6:45-7:45	68	0.85	5	7.35	1406	0.87	24	1.71
7:00-8:00	88	0.61	7	7.95	1407	0.88	22	1.56
7:15-8:15	102	0.71	8	7.84	1412	0.88	29	2.05
7:30-8:30	119	0.83	7	5.83	1396	0.87	37	2.65
7:45-8:45	124	0.86	8	6.45	1299	0.95	37	2.85
8:00-9:00	110	0.86	6	5.45	1248	0.91	40	3.21
8:15-9:15	99	0.80	5	5.05	1098	0.81	37	3.37
8:30-9:30	85	0.66	5	5.81	923	0.76	36	3.90
8:45-9:45	66	0.75	2	3.03	759	0.72	36	4.74

LOCATION NUMBER = 80-28
STREET NAME APPROACH #1= NAGUIRE RD
STREET NAME APPROACH #2= HARTWELL A
STREET NAME APPROACH #3= DUMP DRWY
STREET NAME APPROACH #4= HARTWELL A

COMMUNITY = LEXINGTON
DATE COUNTED = 5/24/90
E' = = 7/11/90
E' = =
E' = =
E' = =

	APPROACH 3			APPROACH 4			INTERSECTION APP. PEAK HR. VOLUME	
PERIOD	VOL	PHF	VOL T % TKS	VOL	PHF	VOL T % TKS	/PEAK HOUR	1516
6:30-7:30	0	ERR	0 ERR	0	ERR	0 ERR	1052	0.72
6:45-7:45	1	0.25	1 100.00	0	ERR	0 ERR	1475	0.87
7:00-8:00	1	0.25	1 100.00	0	ERR	0 ERR	1496	0.88
7:15-8:15	1	0.25	1 100.00	0	ERR	0 ERR	1515	0.90
7:30-8:30	1	0.25	1 100.00	0	ERR	0 ERR	1516	0.90
7:45-8:45	0	ERR	0 ERR	0	ERR	0 ERR	1423	0.95
8:00-9:00	0	ERR	0 ERR	0	ERR	0 ERR	1358	0.91
8:15-9:15	1	0.25	1 100.00	0	ERR	0 ERR	1198	0.81
8:30-9:30	1	0.25	1 100.00	0	ERR	0 ERR	1010	0.77
8:45-9:45	1	0.25	1 100.00	0	ERR	0 ERR	826	0.72

	APPRO. 1			APPRO. 2			APPRO 3.			APPRO. 4		
PERIOD	R	S	L	R	S	L	R	S	L	R	S	L
6:30-7:30	0	0	48	186	818	0	0	0	0	0	0	0
6:45-7:45	0	0	68	296	1108	2	1	0	0	0	0	0
7:00-8:00	0	0	88	308	1097	2	1	0	0	0	0	0
7:15-8:15	0	0	102	315	1095	2	1	0	0	0	0	0
7:30-8:30	0	0	119	313	1080	3	1	0	0	0	0	0
7:45-8:45	0	0	124	261	1037	1	0	0	0	0	0	0
8:00-9:00	0	0	110	246	1001	1	0	0	0	0	0	0
8:15-9:15	0	0	99	215	882	1	1	0	0	0	0	0
8:30-9:30	0	0	86	195	727	1	1	0	0	0	0	0
8:45-9:45	0	0	66	159	598	2	1	0	0	0	0	0
TOTAL	0	0	258	716	2743	5	2	0	0	0	0	0

	EXIT	VOL.ENTER APP 1		EXIT	VOL.ENTER APP 2		EXIT	VOL.ENTER APP 3		EXIT	VOL.ENTER APP 4	
PERIOD												
6:30-7:30	186	48		48	1004		0	0		818	0	
6:45-7:45	296	68		69	1406		2	1		1108	0	
7:00-8:00	308	88		89	1407		2	1		1097	0	
7:15-8:15	315	102		103	1412		2	1		1095	0	
7:30-8:30	313	119		120	1396		3	1		1080	0	
7:45-8:45	261	124		124	1299		1	0		1037	0	
8:00-9:00	246	110		110	1248		1	0		1001	0	
8:15-9:15	215	99		100	1098		1	1		882	0	
8:30-9:30	195	86		87	923		1	1		727	0	
8:45-9:45	159	66		67	759		2	1		598	0	
TOTAL	716	258		260	3464		5	2		2743	0	

LOCATION NUMBER = RD-28
STREET NAME APPROACH #1= MAGUIRE RD
STREET NAME APPROACH #2= HARTWELL A
STREET NAME APPROACH #3= DUMP DRWY
STREET NAME APPROACH #4= HARTWELL A

COMMUNITY = LEXINGTON
DATE COUNTED = 5/24/90
E' = = 7/11/90
E' = =
E' = =
E' = =

CUMULATIVE VOLUME FIGURES

PERIOD	R1	S1	L1	TRR1	TRS1	TRL1	R2	S2	L2	TRR2	TRS2	TRL2
11:00-11:15			14			2	14	0	0	2	11	0
11:15-11:30			46			4	44	100	0	9	17	0
11:30-11:45			85			8	75	219	0	10	24	0
11:45-12:00			111			8	84	377	0	12	28	0
12:00-12:15			137			10	124	538	0	13	39	0
12:15-12:30			165			16	167	690	0	16	44	0
12:30-12:45			185			18	210	858	2	21	46	2
12:45-1:00			208			20	244	1027	2	24	51	2
1:00-1:15			232			27	281	1234	2	25	56	2
1:15-1:30			244			29	298	1400	2	27	62	2
N/A												
N/A												
N/A												

CUMULATIVE VOLUME FIGURES

PERIOD	R3	S3	L3	TRR3	TRS3	TRL3	R4	S4	L4	TRR4	TRS4	TRL4
11:00-11:15	0	0		0	0							
11:15-11:30	0	0		1	0							
11:30-11:45	0	0		1	0							
11:45-12:00	1	0		1	0							
12:00-12:15	1	0		1	0							
12:15-12:30	1	0		1	0							
12:30-12:45	2	0		1	0							
12:45-1:00	2	0		2	0							
1:00-1:15	2	0		2	0							
1:15-1:30	2	0		2	0							
N/A												
N/A												
N/A												

ACTUAL TIME PERIOD VOLUME FIGURE

PERIOD	R1	S1	L1	TRR1	TRS1	TRL1	R2	S2	L2	TRR2	TRS2	TRL2
11:00-11:15			14			2	14	0	0	2	11	0
11:15-11:30	0	0	32	0	0	2	30	100	0	7	6	0
11:30-11:45	0	0	39	0	0	4	31	119	0	1	7	0
11:45-12:00	0	0	26	0	0	0	9	158	0	2	4	0
12:00-12:15	0	0	26	0	0	2	40	161	0	1	11	0
12:15-12:30	0	0	28	0	0	6	43	152	0	3	5	0
12:30-12:45	0	0	20	0	0	2	43	168	2	5	2	2
12:45-1:00	0	0	23	0	0	2	34	169	0	3	5	0
1:00-1:15	0	0	24	0	0	7	37	207	0	1	5	0
1:15-1:30	0	0	12	0	0	2	17	166	0	2	6	0
N/A												
N/A												
N/A												
TOTAL	0	0	244	0	0	29	298	1400	2	27	62	2

LOCATION NUMBER = 80-28
STREET NAME APPROACH #1= MAGUIRE RD
STREET NAME APPROACH #2= HARTWELL A
STREET NAME APPROACH #3= DUMP DRWY
STREET NAME APPROACH #4= HARTWELL A

COMMUNITY = LEXINGTON
DATE COUNTED = 5/24/90
E' = = 7/11/90
E' = =
E' = =
E' = =

ACTUAL TIME PERIOD VOLUME FIGURE

PERIOD	R3	S3	L3	TRR3	TRS3	TRL3	R4	S4	L4	TRR4	TRS4	TRL4
11:00-11:15	0	0		0	0							
11:15-11:30	0	0	0	1	0	0	0	0	0	0	0	0
11:30-11:45	0	0	0	0	0	0	0	0	0	0	0	0
11:45-12:00	1	0	0	0	0	0	0	0	0	0	0	0
12:00-12:15	0	0	0	0	0	0	0	0	0	0	0	0
12:15-12:30	0	0	0	0	0	0	0	0	0	0	0	0
12:30-12:45	1	0	0	0	0	0	0	0	0	0	0	0
12:45-1:00	0	0	0	1	0	0	0	0	0	0	0	0
1:00-1:15	0	0	0	0	0	0	0	0	0	0	0	0
1:15-1:30	0	0	0	0	0	0	0	0	0	0	0	0
N/A												
N/A												
N/A												
TOTAL	2	0	0	2	0	0	0	0	0	0	0	0

ACTUAL TIME PERIOD VOLUME FIGURE

PERIOD	ENTER 1	EXIT	ENTER 2	EXIT	ENTER 3	EXIT	ENTER 4	EXIT
11:00-11:15	16	16	27	16	0	0	0	11
11:15-11:30	34	37	143	35	1	0	0	106
11:30-11:45	43	32	158	43	0	0	0	126
11:45-12:00	26	11	173	27	1	0	0	162
12:00-12:15	28	41	213	28	0	0	0	172
12:15-12:30	34	46	203	34	0	0	0	157
12:30-12:45	22	48	222	23	1	4	0	170
12:45-1:00	25	37	211	26	1	0	0	174
1:00-1:15	31	38	250	31	0	0	0	212
1:15-1:30	14	19	191	14	0	0	0	172
N/A	0	0	0	0	0	0	0	0
N/A	0	0	0	0	0	0	0	0
N/A	0	0	0	0	0	0	0	0
TOTAL	273	325	1791	277	4	4	0	1462

	APPROACH 1				APPROACH 2			
PERIOD	VOL	PHF	VOL T	% TKS	VOL	PHF	VOL T	% TKS
11:00-12:00	119	0.69	8	6.72	501	0.72	40	7.98
11:15-12:15	131	0.76	8	6.11	687	0.81	39	5.68
11:30-12:30	131	0.76	12	9.16	747	0.88	34	4.55
11:45-12:45	110	0.91	10	9.09	811	0.91	35	4.32
12:00-1:00	109	0.80	12	11.01	849	0.96	37	4.36
12:15-1:15	112	0.82	17	15.18	886	0.89	31	3.50
12:30-1:30	92	0.74	13	14.13	874	0.87	31	3.55
N/A								
N/A								
N/A								

LOCATION NUMBER = R0-28
STREET NAME APPROACH #1 = MAGUIRE RD
STREET NAME APPROACH #2 = HARTWELL A
STREET NAME APPROACH #3 = DUMP DRWY
STREET NAME APPROACH #4 = HARTWELL A

COMMUNITY = LEXINGTON
DATE COUNTED = 5/24/90
E' = = 7/11/90
E' = =
E' = =
E' = =

	APPROACH 3				APPROACH 4				INTERSECTION APP. PEAK HR. VOLUME	
PERIOD	VOL	PHF	VOL T	% TKS	VOL	PHF	VOL T	% TKS	/PEAK HOUR	1000
11:00-12:00	2	0.50	1	50.00	0	ERR	0	ERR	622	0.77
11:15-12:15	2	0.50	1	50.00	0	ERR	0	ERR	820	0.85
11:30-12:30	1	0.25	0	0.00	0	ERR	0	ERR	879	0.91
11:45-12:45	2	0.50	0	0.00	0	ERR	0	ERR	923	0.94
12:00-1:00	2	0.50	1	50.00	0	ERR	0	ERR	960	0.98
12:15-1:15	2	0.50	1	50.00	0	ERR	0	ERR	1000	0.89
12:30-1:30	2	0.50	1	50.00	0	ERR	0	ERR	968	0.86
N/A									0	0.00
N/A									0	0.00
N/A									0	0.00

	APPRO. 1			APPRO. 2			APPRO 3.			APPRO. 4		
PERIOD	R	S	L	R	S	L	R	S	L	R	S	L
11:00-12:00	0	0	119	96	405	0	2	0	0	0	0	0
11:15-12:15	0	0	131	121	566	0	2	0	0	0	0	0
11:30-12:30	0	0	131	130	617	0	1	0	0	0	0	0
11:45-12:45	0	0	110	146	661	4	2	0	0	0	0	0
12:00-1:00	0	0	109	172	673	4	2	0	0	0	0	0
12:15-1:15	0	0	112	169	713	4	2	0	0	0	0	0
12:30-1:30	0	0	92	142	728	4	2	0	0	0	0	0
N/A												
N/A												
N/A												
TOTAL	0	0	273	325	1462	4	4	0	0	0	0	0

	EXIT	VOL.ENTER APP 1	EXIT	VOL.ENTER APP 2	EXIT	VOL.ENTER APP 3	EXIT	VOL.ENTER APP 4
PERIOD								
11:00-12:00	96	119	121	501	0	2	405	0
11:15-12:15	121	131	133	687	0	2	566	0
11:30-12:30	130	131	132	747	0	1	617	0
11:45-12:45	146	110	112	811	4	2	661	0
12:00-1:00	172	109	111	849	4	2	673	0
12:15-1:15	169	112	114	886	4	2	713	0
12:30-1:30	142	92	94	874	4	2	728	0
TOTAL	325	273	277	1791	4	4	1462	0

LOCATION NUMBER = FO-28
STREET NAME APPROACH #1= MAGUIRE RD
STREET NAME APPROACH #2= HARTWELL A
STREET NAME APPROACH #3= DUMP DRWY
STREET NAME APPROACH #4= HARTWELL A

COMMUNITY = LEXINGTON
DATE COUNTED = 5/24/90
E* = = 7/11/90
E* = =
E* = =

CUMULATIVE VOLUME FIGURES

PERIOD	R1	S1	L1	TRR1	TRS1	TRL1	R2	S2	L2	TRR2	TRS2	TRL2
2:30-2:45			0			0	0	0	0	0	0	0
2:45-3:00			0			0	0	0	0	0	0	0
3:00-3:15			28			1	23	88	0	2	4	0
3:15-3:30			64			3	45	211	0	2	9	0
3:30-3:45			131			4	68	309	0	4	15	0
3:45-4:00			170			7	88	405	0	7	18	0
4:00-4:15			216			9	99	488	0	9	21	0
4:15-4:30			269			9	142	596	0	12	24	0
4:30-4:45			341			9	179	679	0	17	29	0
4:45-5:00			414			9	218	774	0	18	29	0
5:00-5:15			485			10	272	872	0	20	30	0
5:15-5:30			536			10	320	964	0	22	30	0
5:30-5:45			576			11	376	1048	0	23	30	0
5:45-6:00			600			12	422	1152	0	24	32	0
6:00-6:15			524			12	446	1239	0	26	33	0
6:15-6:30			633			16	458	1329	0	27	34	0

CUMULATIVE VOLUME FIGURES

PERIOD	R3	S3	L3	TRR3	TRS3	TRL3	R4	S4	L4	TRR4	TRS4	TRL4
2:30-2:45	0	0		0	0							
2:45-3:00	0	0		0	0							
3:00-3:15	0	0		0	0							
3:15-3:30	0	0		0	0							
3:30-3:45	0	0		0	0							
3:45-4:00	0	0		0	0							
4:00-4:15	0	0		0	0							
4:15-4:30	0	0		0	0							
4:30-4:45	0	0		0	0							
4:45-5:00	0	0		0	0							
5:00-5:15	0	0		0	0							
5:15-5:30	0	0		0	0							
5:30-5:45	0	0		0	0							
5:45-6:00	0	0		0	0							
6:00-6:15	0	0		0	0							
6:15-6:30	0	0		0	0							

ACTUAL TIME PERIOD VOLUME FIGURES

PERIOD	R1	S1	L1	TRR1	TRS1	TRL1	R2	S2	L2	TRR2	TRS2	TRL2
2:30-2:45			0			0	0	0	0	0	0	0
2:45-3:00	0	0	0	0	0	0	0	0	0	0	0	0
3:00-3:15	0	0	28	0	0	1	23	88	0	2	4	0
3:15-3:30	0	0	36	0	0	2	22	123	0	0	5	0
3:30-3:45	0	0	67	0	0	1	23	98	0	2	6	0
3:45-4:00	0	0	39	0	0	3	20	96	0	3	3	0
4:00-4:15	0	0	46	0	0	2	11	83	0	2	3	0
4:15-4:30	0	0	53	0	0	0	43	108	0	3	3	0
4:30-4:45	0	0	72	0	0	0	37	83	0	5	5	0
4:45-5:00	0	0	73	0	0	0	39	95	0	1	0	0
5:00-5:15	0	0	71	0	0	1	54	98	0	2	1	0
5:15-5:30	0	0	51	0	0	0	48	92	0	2	0	0
5:30-5:45	0	0	40	0	0	1	56	84	0	1	0	0
5:45-6:00	0	0	24	0	0	1	46	104	0	1	2	0
6:00-6:15	0	0	24	0	0	0	24	87	0	2	1	0

LOCATION NUMBER = RD-28
STREET NAME APPROACH #1= MAGUIRE RD
STREET NAME APPROACH #2= HARTWELL A
STREET NAME APPROACH #3= DUMP DRWY
STREET NAME APPROACH #4= HARTWELL A

COMMUNITY = LEXINGTON
DATE COUNTED = 5/24/90
E' = = 7/11/90
E' = =
E' = =
E' = =

ACTUAL TIME PERIOD VOLUME FIGURE

PERIOD	R3	S3	L3	TRR3	TRS3	TRL3	R4	S4	L4	TRR4	TRS4	TRL4
2:30-2:45	0	0		0	0							
2:45-3:00	0	0	0	0	0	0	0	0	0	0	0	0
3:00-3:15	0	0	0	0	0	0	0	0	0	0	0	0
3:15-3:30	0	0	0	0	0	0	0	0	0	0	0	0
3:30-3:45	0	0	0	0	0	0	0	0	0	0	0	0
3:45-4:00	0	0	0	0	0	0	0	0	0	0	0	0
4:00-4:15	0	0	0	0	0	0	0	0	0	0	0	0
4:15-4:30	0	0	0	0	0	0	0	0	0	0	0	0
4:30-4:45	0	0	0	0	0	0	0	0	0	0	0	0
4:45-5:00	0	0	0	0	0	0	0	0	0	0	0	0
5:00-5:15	0	0	0	0	0	0	0	0	0	0	0	0
5:15-5:30	0	0	0	0	0	0	0	0	0	0	0	0
5:30-5:45	0	0	0	0	0	0	0	0	0	0	0	0
5:45-6:00	0	0	0	0	0	0	0	0	0	0	0	0
6:00-6:15	0	0	0	0	0	0	0	0	0	0	0	0
6:15-6:30	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	0	0	0	0	0	0	0	0	0	0	0	0

ACTUAL TIME PERIOD VOLUME FIGURE

PERIOD	ENTER 1	EXIT	ENTER 2	EXIT	ENTER 3	EXIT	ENTER 4	EXIT
2:30-2:45	0	0	0	0	0	0	0	0
2:45-3:00	0	0	0	0	0	0	0	0
3:00-3:15	29	25	117	29	0	0	0	92
3:15-3:30	38	22	150	38	0	0	0	128
3:30-3:45	68	25	129	68	0	0	0	104
3:45-4:00	42	23	122	42	0	0	0	99
4:00-4:15	48	13	99	48	0	0	0	86
4:15-4:30	53	46	157	53	0	0	0	111
4:30-4:45	72	42	130	72	0	0	0	88
4:45-5:00	73	40	135	73	0	0	0	95
5:00-5:15	72	56	155	72	0	0	0	99
5:15-5:30	51	50	142	51	0	0	0	92
5:30-5:45	41	57	141	41	0	0	0	84
5:45-6:00	25	47	153	25	0	0	0	106
6:00-6:15	24	25	114	24	0	0	0	88
6:15-6:30	13	13	104	13	0	0	0	91
TOTAL	649	485	1848	649	0	0	0	1363

	APPROACH 1				APPROACH 2			
PERIOD	VOL	PHF	VOL T	% TKS	VOL	PHF	VOL T	% TKS
2:30-3:30	67	0.44	3	4.48	267	0.45	11	4.12
2:45-3:45	135	0.50	4	2.96	396	0.66	19	4.80
3:00-4:00	177	0.65	7	3.95	518	0.86	25	4.83
3:15-4:15	196	0.72	8	4.08	500	0.83	24	4.80
3:30-4:30	211	0.78	6	2.84	507	0.81	25	4.93
3:45-4:45	215	0.75	5	2.33	508	0.81	27	5.31
4:00-5:00	246	0.84	2	0.81	521	0.83	22	4.22
4:15-5:15	279	0.92	1	0.37	577	0.92	20	3.47
4:30-5:30	268	0.92	1	0.37	562	0.91	16	2.85
4:45-5:45	237	0.81	2	0.84	573	0.92	7	1.22
5:00-6:00	189	0.66	3	1.59	591	0.95	9	1.52
5:15-6:15	141	0.69	2	1.42	550	0.90	9	1.64

LOCATION NUMBER = RO-28
STREET NAME APPROACH #1= MAGUIRE RD
STREET NAME APPROACH #2= HARTWELL A
STREET NAME APPROACH #3= DUMP DRWY
STREET NAME APPROACH #4= HARTWELL A

COMMUNITY = LEXINGTON
DATE COUNTED = 5/24/90
E' = = 7/11/90
E' = =
E' = =
E' = =

	APPROACH 3				APPROACH 4				INTERSECTION APP. PEAK HR. VOLUME	
PERIOD	VOL	PHF	VOL T	% TKS	VOL	PHF	VOL T	% TKS	/PEAK HOUR	847
2:30-3:30	0	ERR		0 ERR	0	ERR		0 ERR	334	0.44
2:45-3:45	0	ERR		0 ERR	0	ERR		0 ERR	531	0.67
3:00-4:00	0	ERR		0 ERR	0	ERR		0 ERR	695	0.88
3:15-4:15	0	ERR		0 ERR	0	ERR		0 ERR	696	0.88
3:30-4:30	0	ERR		0 ERR	0	ERR		0 ERR	718	0.85
3:45-4:45	0	ERR		0 ERR	0	ERR		0 ERR	723	0.86
4:00-5:00	0	ERR		0 ERR	0	ERR		0 ERR	767	0.91
4:15-5:15	0	ERR		0 ERR	0	ERR		0 ERR	847	0.93
4:30-5:30	0	ERR		0 ERR	0	ERR		0 ERR	830	0.91
4:45-5:45	0	ERR		0 ERR	0	ERR		0 ERR	810	0.89
5:00-6:00	0	ERR		0 ERR	0	ERR		0 ERR	780	0.86
5:15-6:15	0	ERR		0 ERR	0	ERR		0 ERR	691	0.90
5:30-6:30	0	ERR		0 ERR	0	ERR		0 ERR	615	0.84

	APPRO. 1			APPRO. 2			APPRO 3.			APPRO. 4		
PERIOD	P	S	L	R	S	L	R	S	L	R	S	L
2:30-3:30	0	0	67	47	220	0	0	0	0	0	0	0
2:45-3:45	0	0	135	72	324	0	0	0	0	0	0	0
3:00-4:00	0	0	177	95	423	0	0	0	0	0	0	0
3:15-4:15	0	0	196	83	417	0	0	0	0	0	0	0
3:30-4:30	0	0	211	107	400	0	0	0	0	0	0	0
3:45-4:45	0	0	215	124	384	0	0	0	0	0	0	0
4:00-5:00	0	0	246	141	380	0	0	0	0	0	0	0
4:15-5:15	0	0	270	184	393	0	0	0	0	0	0	0
4:30-5:30	0	0	268	188	374	0	0	0	0	0	0	0
4:45-5:45	0	0	237	203	370	0	0	0	0	0	0	0
5:00-6:00	0	0	189	210	381	0	0	0	0	0	0	0
5:15-6:15	0	0	141	180	370	0	0	0	0	0	0	0
5:30-6:30	0	0	103	143	369	0	0	0	0	0	0	0
TOTAL	0	0	649	485	1363	0	0	0	0	0	0	0

	EXIT	VOL.ENTER APP 1	EXIT	VOL.ENTER APP 2	EXIT	VOL.ENTER APP 3	EXIT	VOL.ENTER APP 4
PERIOD								
2:30-3:30	47	67	67	267	0	0	220	0
2:45-3:45	72	135	135	396	0	0	324	0
3:00-4:00	95	177	177	518	0	0	423	0
3:15-4:15	83	196	196	500	0	0	417	0
3:30-4:30	107	211	211	507	0	0	400	0
3:45-4:45	124	215	215	508	0	0	384	0
4:00-5:00	141	246	246	521	0	0	380	0
4:15-5:15	184	270	270	577	0	0	393	0
4:30-5:30	198	268	268	562	0	0	374	0
4:45-5:45	203	237	237	573	0	0	370	0
5:00-6:00	210	189	189	591	0	0	381	0
5:15-6:15	180	141	141	550	0	0	370	0
5:30-6:30	143	103	103	512	0	0	369	0
TOTAL	485	649	649	1848	0	0	1363	0

LOCATION NUMBER = 90-31
STREET NAME APPROACH #1= HARTWELL AV
STREET NAME APPROACH #2= WOOD ST.
STREET NAME APPROACH #3= HARTWELL AV
STREET NAME APPROACH #4= 0

COMMUNITY = LEXINGTO
DATE COUNTED = 6/7/90
E' = = 6/27/90
E' = =
E' = =
E' = =

CUMULATIVE VOLUME FIGURES

PERIOD	R1	S1	L1	TRR1	TRS1	TRL1	R2	S2	L2	TRR2	TRS2	TRL2
6:30-6:45		0	0		0	0	0		0	0		0
6:45-7:00		121	41		6	1	53		2	0		0
7:00-7:15		429	121		11	2	126		5	1		0
7:15-7:30		649	139		17	4	210		11	2		0
7:30-7:45		883	255		22	6	297		17	4		0
7:45-8:00		1114	339		25	7	395		27	6		0
8:00-8:15		1290	452		31	11	492		35	7		0
8:15-8:30		1492	600		40	14	571		47	10		0
8:30-8:45		1723	746		41	19	646		63	10		1
8:45-9:00		1862	802		47	21	698		70	12		1
9:00-9:15		2035	847		49	25	768		74	13		3
9:15-9:30		2125	883		51	27	808		84	17		4
9:30-9:45		2227	919		60	30	845		86	17		4

CUMULATIVE VOLUME FIGURES

PERIOD	R3	S3	L3	TRR3	TRS3	TRL3	R4	S4	L4	TRR4	TRS4	TRL4
6:30-6:45	0	0		0	0							
6:45-7:00	0	29		0	1							
7:00-7:15	0	82		0	3							
7:15-7:30	1	161		0	13							
7:30-7:45	1	252		0	17							
7:45-8:00	4	320		0	21							
8:00-8:15	5	398		1	26							
8:15-8:30	9	480		2	37							
8:30-8:45	11	547		3	49							
8:45-9:00	12	599		4	52							
9:00-9:15	14	664		5	56							
9:15-9:30	20	708		6	62							
9:30-9:45	42	759		7	68							

ACTUAL TIME PERIOD VOLUME FIGURE

PERIOD	R1	S1	L1	TRR1	TRS1	TRL1	R2	S2	L2	TRR2	TRS2	TRL2
6:30-6:45		0	0		0	0	0		0	0		0
6:45-7:00	0	121	41	0	6	1	53	0	2	0	0	0
7:00-7:15	0	248	80	0	5	1	73	0	3	1	0	0
7:15-7:30	0	220	68	0	6	2	84	0	6	1	0	0
7:30-7:45	0	234	75	0	5	2	87	0	6	2	0	0
7:45-8:00	0	231	74	0	3	1	98	0	10	2	0	0
8:00-8:15	0	176	113	0	6	4	97	0	8	1	0	0
8:15-8:30	0	202	148	0	9	3	79	0	12	3	0	0
8:30-8:45	0	231	146	0	1	5	75	0	16	0	0	1
8:45-9:00	0	139	56	0	6	2	52	0	7	2	0	0
9:00-9:15	0	173	45	0	2	4	70	0	4	1	0	2
9:15-9:30	0	90	36	0	2	2	40	0	10	4	0	1
9:30-9:45	0	102	36	0	9	3	37	0	2	0	0	0
TOTAL	0	2227	919	0	60	30	845	0	86	17	0	4

LOCATION NUMBER = 80-31
STREET NAME APPROACH #1= HARTWELL AV
STREET NAME APPROACH #2= WOOD ST.
STREET NAME APPROACH #3= HARTWELL AV
STREET NAME APPROACH #4= 0

COMMUNITY = LEXINGTO
DATE COUNTED = 6/7/90
E' = = 6/27/90
E' = =
E' = =
E' = =

ACTUAL TIME PERIOD VOLUME FIGURE

PERIOD	R3	S3	L3	TRR3	TRS3	TRL3	R4	S4	L4	TRR4	TRS4	TRL4
6:30-6:45	0	0		0	0							
6:45-7:00	0	29	0	0	1	0	0	0	0	0	0	0
7:00-7:15	0	53	0	0	2	0	0	0	0	0	0	0
7:15-7:30	1	79	0	0	10	0	0	0	0	0	0	0
7:30-7:45	0	89	0	0	4	0	0	0	0	0	0	0
7:45-8:00	3	70	0	0	4	0	0	0	0	0	0	0
8:00-8:15	1	78	0	1	5	0	0	0	0	0	0	0
8:15-8:30	4	82	0	1	11	0	0	0	0	0	0	0
8:30-8:45	2	67	0	1	12	0	0	0	0	0	0	0
8:45-9:00	1	52	0	1	3	0	0	0	0	0	0	0
9:00-9:15	2	65	0	1	4	0	0	0	0	0	0	0
9:15-9:30	6	44	0	1	6	0	0	0	0	0	0	0
9:30-9:45	22	51	0	1	6	0	0	0	0	0	0	0
TOTAL	42	759	0	7	68	0	0	0	0	0	0	0

ACTUAL TIME PERIOD VOLUME FIGURE

PERIOD	ENTER 1	EXIT	ENTER 2	EXIT	ENTER 3	EXIT	ENTER 4	EXIT
6:30-6:45	0	0	0	0	0	0	0	0
6:45-7:00	229	83	55	42	30	189	0	0
7:00-7:15	334	129	77	81	55	256	0	0
7:15-7:30	296	174	71	71	90	232	0	0
7:30-7:45	317	182	95	78	93	245	0	0
7:45-8:00	309	174	110	78	77	244	0	0
8:00-8:15	299	181	106	119	85	190	0	0
8:15-8:30	352	175	94	156	98	223	0	0
8:30-8:45	383	154	92	154	82	249	0	0
8:45-9:00	203	109	61	60	57	152	0	0
9:00-9:15	224	140	77	52	72	181	0	0
9:15-9:30	130	94	55	45	57	103	0	0
9:30-9:45	150	94	39	62	80	113	0	0
TOTAL	3236	1689	952	998	876	2377	0	0

	APPROACH 1				APPROACH 2			
PERIOD	VOL	PHF	VOL T	% TKS	VOL	PHF	VOL T	% TKS
6:30-7:30	859	0.64	21	2.44	223	0.61	2	0.90
6:45-7:45	1176	0.88	28	2.38	318	0.84	4	1.26
7:00-8:00	1256	0.94	25	1.99	373	0.85	6	1.61
7:15-8:15	1221	0.95	29	2.38	402	0.91	6	1.49
7:30-8:30	1287	0.89	33	2.56	405	0.92	8	1.98
7:45-8:45	1353	0.88	32	2.37	402	0.91	7	1.74
8:00-9:00	1247	0.81	36	2.89	353	0.83	7	1.98
8:15-9:15	1172	0.77	32	2.73	324	0.86	9	2.78
8:30-9:30	940	0.61	24	2.55	285	0.77	11	3.86
8:45-9:45	707	0.79	30	4.24	232	0.75	10	4.31

LOCATION NUMBER = RD-31
STREET NAME APPROACH 1= HARTWELL AV
STREET NAME APPROACH #2= WOOD ST.
STREET NAME APPROACH #3= HARTWELL AV
STREET NAME APPROACH #4= 0

COMMUNITY = LEXINGTO
DATE COUNTED = 6/7/90
E' = = 6/27/90
E' = =
E' = =
E' = =

	APPROACH 3				APPROACH 4				INTERSECTION APP. PEAK HR. VOLUME	
PERIOD	VOL	PHF	VOL T	% TKS	VOL	PHF	VOL T	% TKS	/PEAK HOUR	2097
6:30-7:30	175	0.49	13	7.43	0	ERR	0	ERR	1257	0.66
6:45-7:45	268	0.72	17	6.34	0	ERR	0	ERR	1762	0.87
7:00-8:00	315	0.85	20	6.35	0	ERR	0	ERR	1944	0.96
7:15-8:15	345	0.93	24	6.96	0	ERR	0	ERR	1968	0.97
7:30-8:30	353	0.90	26	7.37	0	ERR	0	ERR	2045	0.92
7:45-8:45	342	0.87	35	10.23	0	ERR	0	ERR	2097	0.94
8:00-9:00	322	0.82	35	10.87	0	ERR	0	ERR	1922	0.86
8:15-9:15	309	0.79	34	11.00	0	ERR	0	ERR	1805	0.81
8:30-9:30	268	0.82	29	10.82	0	ERR	0	ERR	1493	0.67
8:45-9:45	266	0.83	23	8.65	0	ERR	0	ERR	1205	0.81

	APPRO. 1			APPRO. 2			APPRO 3.			APPRO. 4		
PERIOD	R	S	L	R	S	L	R	S	L	R	S	L
6:30-7:30	0	666	193	212	0	11	1	174	0	0	0	0
6:45-7:45	0	905	271	301	0	17	1	267	0	0	0	0
7:00-8:00	0	952	304	348	0	25	4	311	0	0	0	0
7:15-8:15	0	881	340	372	0	30	6	339	0	0	0	0
7:30-8:30	0	866	421	369	0	36	10	343	0	0	0	0
7:45-8:45	0	959	494	355	0	47	13	329	0	0	0	0
8:00-9:00	0	770	477	309	0	44	12	310	0	0	0	0
8:15-9:15	0	753	439	292	0	42	13	296	0	0	0	0
8:30-9:30	0	644	296	244	0	41	15	253	0	0	0	0
8:45-9:45	0	523	124	206	0	26	35	231	0	0	0	0
TOTAL	0	2287	949	862	0	90	49	827	0	0	0	0

	EXIT	VOL.ENTER APP 1	EXIT	VOL.ENTER APP 2	EXIT	VOL.ENTER APP 3	EXIT	VOL.ENTER APP 4
PERIOD								
6:30-7:30	386	859	194	223	677	175	0	0
6:45-7:45	568	1176	272	318	922	268	0	0
7:00-8:00	659	1256	308	373	977	315	0	0
7:15-8:15	711	1221	346	402	911	345	0	0
7:30-8:30	712	1287	431	405	902	353	0	0
7:45-8:45	684	1353	507	402	906	342	0	0
8:00-9:00	619	1247	489	353	814	322	0	0
8:15-9:15	578	1172	422	324	805	309	0	0
8:30-9:30	497	940	311	285	685	268	0	0
8:45-9:45	437	707	219	232	549	266	0	0
TOTAL	1689	3235	998	952	2377	876	0	0

LOCATION NUMBER = 30-31
STREET NAME APPROACH #1= HARTWELL
STREET NAME APPROACH #2= WOOD ST.
STREET NAME APPROACH #3= HARTWELL
STREET NAME APPROACH #4=

COMMUNITY = LEXINGTO
DATE COUNTED = 6/7/90
E* = = 6/27/90
E* = = 7/23/90
E* = =
E* = =

CUMULATIVE VOLUME FIGURES

PERIOD	R1	S1	L1	TRR1	TRS1	TRL1	R2	S2	L2	TRR2	TRS2	TRL2
11:00-11:15		111	25		4	5	29		3	1		1
11:15-11:30		197	55		8	8	60		6	3		2
11:30-11:45		333	103		12	13	116		10	6		2
11:45-12:00		486	148		20	14	181		18	9		2
12:00-12:15		604	194		23	16	235		26	10		2
12:15-12:30		726	253		25	19	288		43	10		2
12:30-12:45		918	311		31	20	321		51	14		2
12:45-1:00		1098	357		34	24	367		57	16		2
1:00-1:15		1251	387		35	26	406		63	18		2
1:15-1:30		1401	421		38	30	444		69	19		3
N/A												
N/A												
N/A												

CUMULATIVE VOLUME FIGURES

PERIOD	R3	S3	L3	TRR3	TRS3	TRL3	R4	S4	L4	TRR4	TRS4	TRL4
11:00-11:15	5	124		2	8							
11:15-11:30	9	257		4	12							
11:30-11:45	14	452		4	18							
11:45-12:00	20	619		6	22							
12:00-12:15	30	775		7	24							
12:15-12:30	39	892		9	29							
12:30-12:45	44	1020		11	34							
12:45-1:00	53	1113		12	36							
1:00-1:15	59	1252		13	40							
1:15-1:30	66	1362		14	44							
N/A												
N/A												
N/A												

ACTUAL TIME PERIOD VOLUME FIGURE

PERIOD	R1	S1	L1	TRR1	TRS1	TRL1	R2	S2	L2	TRR2	TRS2	TRL2
11:00-11:15		111	25		4	5	29		3	1		1
11:15-11:30	0	86	30	0	4	3	31	0	3	2	0	1
11:30-11:45	0	136	48	0	4	5	56	0	4	3	0	0
11:45-12:00	0	153	45	0	8	1	65	0	8	3	0	0
12:00-12:15	0	118	46	0	3	2	54	0	8	1	0	0
12:15-12:30	0	122	59	0	2	3	53	0	17	0	0	0
12:30-12:45	0	192	58	0	6	1	33	0	8	4	0	0
12:45-1:00	0	180	46	0	3	4	46	0	6	2	0	0
1:00-1:15	0	163	30	0	1	2	39	0	6	2	0	0
1:15-1:30	0	140	34	0	3	4	38	0	6	1	0	1
N/A												
N/A												
N/A												
TOTAL	0	1401	421	0	38	30	444	0	69	19	0	3

LOCATION NUMBER = RD-31
STREET NAME APPROACH #1= HARTWELL
STREET NAME APPROACH #2= WOOD ST.
STREET NAME APPROACH #3= HARTWELL
STREET NAME APPROACH #4= 0

COMMUNITY = LEXINGTO
DATE COUNTED = 6/7/90
E' = = 6/27/90
E' = =
E' = =
E' = =

ACTUAL TIME PERIOD VOLUME FIGURE

PERIOD	R3	S3	L3	TRR3	TRS3	TRL3	R4	S4	L4	TRR4	TRS4	TRL4
11:00-11:15	5	124		2	8							
11:15-11:30	4	133	0	2	4	0	0	0	0	0	0	0
11:30-11:45	5	195	0	0	6	0	0	0	0	0	0	0
11:45-12:00	6	167	0	2	4	0	0	0	0	0	0	0
12:00-12:15	10	156	0	1	2	0	0	0	0	0	0	0
12:15-12:30	9	117	0	2	5	0	0	0	0	0	0	0
12:30-12:45	5	128	0	2	5	0	0	0	0	0	0	0
12:45-1:00	9	93	0	1	2	0	0	0	0	0	0	0
1:00-1:15	6	139	0	1	4	0	0	0	0	0	0	0
1:15-1:30	7	110	0	1	4	0	0	0	0	0	0	0
N/A												
N/A												
N/A												
TOTAL	66	1362	0	14	44	0	0	0	0	0	0	0

ACTUAL TIME PERIOD VOLUME FIGURE

PERIOD	ENTER 1	EXIT	ENTER 2	EXIT	ENTER 3	EXIT	ENTER 4	EXIT
11:00-11:15	145	162	34	37	139	119	0	0
11:15-11:30	123	170	37	39	143	94	0	0
11:30-11:45	193	260	63	58	206	144	0	0
11:45-12:00	207	237	76	54	179	169	0	0
12:00-12:15	169	213	63	59	169	129	0	0
12:15-12:30	186	175	70	73	133	141	0	0
12:30-12:45	257	170	45	66	140	206	0	0
12:45-1:00	233	143	54	60	105	189	0	0
1:00-1:15	196	184	47	39	150	170	0	0
1:15-1:30	181	153	46	46	122	150	0	0
N/A	0	0	0	0	0	0	0	0
N/A	0	0	0	0	0	0	0	0
N/A	0	0	0	0	0	0	0	0
TOTAL	1890	1869	535	531	1486	1511	0	0

	APPROACH 1				APPROACH 2			
PERIOD	VOL	PHF	VOL T	% TKS	VOL	PHF	VOL T	% TKS
11:00-12:00	668	0.81	34	5.09	210	0.69	11	5.24
11:15-12:15	692	0.84	30	4.34	239	0.79	10	4.18
11:30-12:30	755	0.91	28	3.71	272	0.89	7	2.57
11:45-12:45	819	0.80	26	3.17	254	0.84	8	3.15
12:00-1:00	845	0.82	24	2.84	232	0.83	7	3.02
12:15-1:15	872	0.85	22	2.52	216	0.77	8	3.70
12:30-1:30	867	0.84	24	2.77	192	0.89	10	5.21
N/A								
N/A								
N/A								

LOCATION NUMBER = 80-31
STREET NAME APPROACH #1 = HARTWELL
STREET NAME APPROACH #2 = WOOD ST.
STREET NAME APPROACH #3 = HARTWELL
STREET NAME APPROACH #4 = 0

COMMUNITY = LEXINGTO
DATE COUNTED = 6/7/90
E' = = 6/27/90
E' = =
E' = =
E' = =

PERIOD	APPROACH 3 VOL	PHF	VOL T	% TKS	APPROACH 4 VOL	PHF	VOL T	% TKS	INTERSECTION APP. PEAK HR. VOLUME /PEAK HOUR 1714	
11:00-12:00	667	0.81	23	4.20	0	ERR	0	ERR	1545	0.84
11:15-12:15	697	0.85	21	3.01	0	ERR	0	ERR	1628	0.88
11:30-12:30	687	0.83	22	3.20	0	ERR	0	ERR	1714	0.93
11:45-12:45	621	0.87	23	3.70	0	ERR	0	ERR	1694	0.92
12:00-1:00	547	0.81	20	3.66	0	ERR	0	ERR	1624	0.92
12:15-1:15	528	0.88	22	4.17	0	ERR	0	ERR	1616	0.91
12:30-1:30	517	0.86	20	3.87	0	ERR	0	ERR	1576	0.89
N/A									0	0.00
N/A									0	0.00
N/A									0	0.00

PERIOD	APPRO. 1 R	S	L	APPRO. 2 R	S	L	APPRO 3. R	S	L	APPRO. 4 R	S	L
11:00-12:00	0	506	162	190	0	20	26	641	0	0	0	0
11:15-12:15	0	512	180	215	0	24	30	667	0	0	0	0
11:30-12:30	0	546	209	235	0	37	35	652	0	0	0	0
11:45-12:45	0	604	215	213	0	41	37	584	0	0	0	0
12:00-1:00	0	626	219	193	0	39	39	508	0	0	0	0
12:15-1:15	0	669	203	179	0	37	35	493	0	0	0	0
12:30-1:30	0	688	179	165	0	27	32	485	0	0	0	0
N/A												
N/A												
N/A												
TOTAL	0	1439	451	463	0	72	80	1406	0	0	0	0

PERIOD	EXIT	VOL.ENTER APP 1	EXIT	VOL.ENTER APP 2	EXIT	VOL.ENTER APP 3	EXIT	VOL.ENTER APP 4
11:00-12:00	831	668	188	210	526	667	0	0
11:15-12:15	892	692	210	239	536	697	0	0
11:30-12:30	897	755	244	272	583	687	0	0
11:45-12:45	797	819	252	254	645	621	0	0
12:00-1:00	701	845	258	232	665	547	0	0
12:15-1:15	672	872	238	216	706	528	0	0
12:30-1:30	650	867	211	192	715	517	0	0
TOTAL	1869	1890	531	535	1511	1486	0	0

LOCATION NUMBER = 80-31
STREET NAME APPROACH #1= HARTWELL AV
STREET NAME APPROACH #2= WOOD ST.
STREET NAME APPROACH #3= HARTWELL AV
STREET NAME APPROACH #4= 0

COMMUNITY = LEXINGTO
DATE COUNTED = 6/7/90
E' = = 6/8/90
E' = =
E' = =
E' = =

CUMULATIVE VOLUME FIGURES

PERIOD	R1	S1	L1	TRR1	TRS1	TRL1	R2	S2	L2	TRR2	TRS2	TRL2
2:30-2:45		0	0		0	0	0		0	0		0
2:45-3:00		0	0		0	0	0		0	0		0
3:00-3:15		31	39		4	4	32		3	2		0
3:15-3:30		161	94		6	7	93		9	3		0
3:30-3:45		223	151		7	8	132		11	4		0
3:45-4:00		294	197		11	9	193		17	6		0
4:00-4:15		354	245		11	10	255		19	8		0
4:15-4:30		448	291		12	14	331		20	8		0
4:30-4:45		555	374		13	15	471		22	8		0
4:45-5:00		638	424		13	18	553		25	8		0
5:00-5:15		733	498		13	18	692		30	11		0
5:15-5:30		842	569		13	19	767		34	11		0
5:30-5:45		930	623		15	19	847		36	11		0
5:45-6:00		1007	669		15	19	905		36	11		0
6:00-6:15		1077	718		15	19	958		38	11		0
6:15-6:30		1143	745		15	19	981		39	11		0

CUMULATIVE VOLUME FIGURES

PERIOD	R3	S3	L3	TRR3	TRS3	TRL3	R4	S4	L4	TRR4	TRS4	TRL4
2:30-2:45	0	0		0	0							
2:45-3:00	0	0		0	0							
3:00-3:15	6	188		1	4							
3:15-3:30	9	351		3	10							
3:30-3:45	20	585		4	11							
3:45-4:00	25	801		6	14							
4:00-4:15	29	1107		7	16							
4:15-4:30	37	1385		9	17							
4:30-4:45	47	1681		11	19							
4:45-5:00	54	1974		11	20							
5:00-5:15	84	2188		11	22							
5:15-5:30	94	2346		11	22							
5:30-5:45	99	2502		11	22							
5:45-6:00	110	2620		11	22							
6:00-6:15	114	2734		11	22							
6:15-6:30	120	2809		11	23							

ACTUAL TIME PERIOD VOLUME FIGURES

PERIOD	R1	S1	L1	TRR1	TRS1	TRL1	R2	S2	L2	TRR2	TRS2	TRL2
2:30-2:45		0	0		0	0	0		0	0		0
2:45-3:00	0	0	0	0	0	0	0	0	0	0	0	0
3:00-3:15	0	31	39	0	4	4	32	0	3	2	0	0
3:15-3:30	0	30	55	0	2	3	61	0	6	1	0	0
3:30-3:45	0	62	57	0	1	1	39	0	2	1	0	0
3:45-4:00	0	71	46	0	4	1	61	0	6	2	0	0
4:00-4:15	0	70	48	0	0	1	62	0	2	2	0	0
4:15-4:30	0	84	46	0	1	4	76	0	1	0	0	0
4:30-4:45	0	103	83	0	1	1	140	0	2	0	0	0
4:45-5:00	0	92	50	0	0	3	82	0	3	0	0	0
5:00-5:15	0	95	74	0	0	0	139	0	5	3	0	0
5:15-5:30	0	109	70	0	0	1	75	0	4	0	0	0
5:30-5:45	0	88	55	0	2	0	80	0	2	0	0	0
5:45-6:00	0	77	46	0	0	0	58	0	0	0	0	0
6:00-6:15	0	70	49	0	0	0	53	0	2	0	0	0

LOCATION NUMBER = 20-31
STREET NAME APPROACH #1= HARTWELL AV
STREET NAME APPROACH #2= WOOD ST.
STREET NAME APPROACH #3= HARTWELL AV
STREET NAME APPROACH #4= 0

COMMUNITY = LEXINGTO
DATE COUNTED = 6/7/90
E* = = 6/8/90
E* = =
E* = =
E* = =

ACTUAL TIME PERIOD VOLUME FIGURE

PERIOD	R3	S3	L3	TRR3	TRS3	TRL3	R4	S4	L4	TRR4	TRS4	TRL4
2:30-2:45	0	0		0	0							
2:45-3:00	0	0	0	0	0	0	0	0	0	0	0	0
3:00-3:15	6	186	0	1	4	0	0	0	0	0	0	0
3:15-3:30	3	193	0	2	6	0	0	0	0	0	0	0
3:30-3:45	11	204	0	1	1	0	0	0	0	0	0	0
3:45-4:00	5	215	0	2	3	0	0	0	0	0	0	0
4:00-4:15	4	336	0	1	2	0	0	0	0	0	0	0
4:15-4:30	8	278	0	2	1	0	0	0	0	0	0	0
4:30-4:45	10	296	0	2	2	0	0	0	0	0	0	0
4:45-5:00	7	193	0	0	1	0	0	0	0	0	0	0
5:00-5:15	30	314	0	0	2	0	0	0	0	0	0	0
5:15-5:30	10	158	0	0	0	0	0	0	0	0	0	0
5:30-5:45	5	156	0	0	0	0	0	0	0	0	0	0
5:45-6:00	11	118	0	0	0	0	0	0	0	0	0	0
6:00-6:15	4	114	0	0	0	0	0	0	0	0	0	0
6:15-6:30	6	75	0	0	1	0	0	0	0	0	0	0
TOTAL	120	2309	0	11	23	0	0	0	0	0	0	0

ACTUAL TIME PERIOD VOLUME FIGURE

PERIOD	ENTER 1	EXIT	ENTER 2	EXIT	ENTER 3	EXIT	ENTER 4	EXIT
2:30-2:45	0	0	0	0	0	0	0	0
2:45-3:00	0	0	0	0	0	0	0	0
3:00-3:15	128	225	37	50	199	88	0	0
3:15-3:30	140	261	68	63	204	88	0	0
3:30-3:45	121	245	42	70	217	65	0	0
3:45-4:00	122	282	69	54	226	81	0	0
4:00-4:15	119	372	66	54	313	72	0	0
4:15-4:30	135	355	77	60	289	86	0	0
4:30-4:45	193	438	142	96	310	111	0	0
4:45-5:00	135	276	85	50	201	85	0	0
5:00-5:15	169	458	147	104	346	100	0	0
5:15-5:30	180	233	79	81	168	113	0	0
5:30-5:45	145	236	82	60	161	92	0	0
5:45-6:00	123	176	58	57	129	77	0	0
6:00-6:15	119	167	55	53	118	72	0	0
6:15-6:30	94	99	24	34	82	67	0	0
TOTAL	1923	3824	1031	896	2963	1197	0	0

	APPROACH 1				APPROACH 2			
PERIOD	VOL	PHF	VOL T	% TKS	VOL	PHF	VOL T	% TKS
2:30-3:30	269	0.48	13	4.85	105	0.39	3	2.86
2:45-3:45	389	0.69	15	3.86	147	0.54	4	2.72
3:00-4:00	511	0.91	20	3.91	216	0.78	6	2.78
3:15-4:15	502	0.90	13	2.59	245	0.89	6	2.45
3:30-4:30	497	0.92	13	2.62	254	0.82	5	1.97
3:45-4:45	569	0.74	13	2.28	354	0.62	4	1.13
4:00-5:00	592	0.75	11	1.89	370	0.65	2	0.54
4:15-5:15	632	0.82	10	1.58	451	0.77	3	0.67
4:30-5:30	677	0.83	6	0.89	453	0.77	3	0.66
4:45-5:45	629	0.87	6	0.95	393	0.67	3	0.76
5:00-6:00	617	0.86	3	0.49	366	0.62	3	0.82
5:15-6:15	567	0.79	3	0.53	274	0.84	0	0.00

LOCATION NUMBER = RP-31
STREET NAME APPROACH #1 = HARTWELL AV
STREET NAME APPROACH #2 = WOOD ST.
STREET NAME APPROACH #3 = HARTWELL AV
STREET NAME APPROACH #4 = 0

COMMUNITY = LEXINGTO
DATE COUNTED = 6/7/90
E' = = 6/8/90
E' = =
E' = =
E' = =

	APPROACH 3				APPROACH 4				INTERSECTION APP. PEAK HR. VOLUME	
PERIOD	VOL	PHF	VOL T	% TKS	VOL	PHF	VOL T	% TKS	/PEAK HOUR	2229
2:30-3:30	403	0.49	13	3.23	0	ERR	0	ERR	776	0.47
2:45-3:45	620	0.71	15	2.42	0	ERR	0	ERR	1156	0.70
3:00-4:00	846	0.94	20	2.36	0	ERR	0	ERR	1573	0.94
3:15-4:15	960	0.77	18	1.88	0	ERR	0	ERR	1707	0.86
3:30-4:30	1045	0.83	13	1.24	0	ERR	0	ERR	1796	0.90
3:45-4:45	1138	0.91	15	1.32	0	ERR	0	ERR	2061	0.80
4:00-5:00	1113	0.89	11	0.99	0	ERR	0	ERR	2065	0.80
4:15-5:15	1146	0.93	10	0.87	0	ERR	0	ERR	2229	0.84
4:30-5:30	1025	0.74	7	0.68	0	ERR	0	ERR	2155	0.81
4:45-5:45	876	0.63	3	0.34	0	ERR	0	ERR	1898	0.72
5:00-6:00	804	0.53	2	0.25	0	ERR	0	ERR	1787	0.67
5:15-6:15	576	0.86	0	0.00	0	ERR	0	ERR	1417	0.83
5:30-6:30	490	0.76	1	0.20	0	ERR	0	ERR	1190	0.77

	APPRO. 1			APPRO. 2			APPRO 3.			APPRO. 4		
PERIOD	R	S	L	R	S	L	R	S	L	R	S	L
2:30-3:30	0	167	101	96	0	9	12	391	0	0	0	0
2:45-3:45	0	230	159	136	0	11	24	596	0	0	0	0
3:00-4:00	0	305	206	199	0	17	31	815	0	0	0	0
3:15-4:15	0	290	212	229	0	16	29	931	0	0	0	0
3:30-4:30	0	293	204	243	0	11	34	1011	0	0	0	0
3:45-4:45	0	339	230	343	0	11	34	1104	0	0	0	0
4:00-5:00	0	345	236	362	0	8	34	1079	0	0	0	0
4:15-5:15	0	371	261	440	0	11	59	1087	0	0	0	0
4:30-5:30	0	395	282	439	0	14	59	966	0	0	0	0
4:45-5:45	0	376	253	379	0	14	52	824	0	0	0	0
5:00-6:00	0	371	246	355	0	11	56	748	0	0	0	0
5:15-6:15	0	346	221	266	0	8	30	546	0	0	0	0
5:30-6:30	0	303	178	214	0	5	26	464	0	0	0	0
TOTAL	0	1153	765	992	0	39	131	2832	0	0	0	0

	EXIT	VOL.ENTER APP 1	EXIT	VOL.ENTER APP 2	EXIT	VOL.ENTER APP 3	EXIT	VOL.ENTER APP 4
PERIOD								
2:30-3:30	487	268	113	105	176	403	0	0
2:45-3:45	732	389	193	147	241	620	0	0
3:00-4:00	1014	511	237	216	322	846	0	0
3:15-4:15	1160	502	241	245	306	960	0	0
3:30-4:30	1254	497	238	254	304	1045	0	0
3:45-4:45	1447	569	264	354	350	1138	0	0
4:00-5:00	1441	582	270	370	354	1113	0	0
4:15-5:15	1527	632	320	451	382	1146	0	0
4:30-5:30	1405	677	341	453	409	1025	0	0
4:45-5:45	1203	629	305	393	390	876	0	0
5:00-6:00	1103	617	302	366	382	804	0	0
5:15-6:15	812	557	251	274	354	576	0	0
5:30-6:30	676	481	204	219	308	490	0	0
TOTAL	3824	1923	896	1031	1197	2963	0	0

LOCATION NUMBER = RU-36

STREET NAME APPROACH #1= BROOKSBIE R

STREET NAME APPROACH #2= GREAT RD.

STREET NAME APPROACH #3=

STREET NAME APPROACH #4= GREAT RD.

COMMUNITY = BEDFORD

DATE COUNTED = 5/24/90

E' = = 6/04/90

E' = =

E' = =

E' = =

CUMULATIVE VOLUME FIGURES

PERIOD	R1	S1	L1	TRR1	TRS1	TRL1	R2	S2	L2	TRR2	TRS2	TRL2
6:30-6:45	0		0	0		0	0	0		0	0	
6:45-7:00	55		15	4		0	12	90		0	8	
7:00-7:15	115		30	8		1	24	198		1	17	
7:15-7:30	214		48	17		1	37	336		2	35	
7:30-7:45	364		63	23		4	48	510		2	48	
7:45-8:00	526		75	30		5	61	693		2	64	
8:00-8:15	667		92	44		5	69	853		3	74	
8:15-8:30	764		102	50		6	84	986		3	94	
8:30-8:45	881		112	51		7	92	1160		3	102	
8:45-9:00	959		121	63		7	104	1310		5	122	
9:00-9:15	1040		130	78		9	113	1443		7	137	
9:15-9:30	1103		134	86		9	121	1574		7	148	
9:30-9:45	1165		140	91		11	130	1712		8	160	

CUMULATIVE VOLUME FIGURES

PERIOD	R3	S3	L3	TRR3	TRS3	TRL3	R4	S4	L4	TRR4	TRS4	TRL4
6:30-6:45								0	0		0	0
6:45-7:00								150	80		15	5
7:00-7:15								309	163		31	11
7:15-7:30								470	268		53	16
7:30-7:45								647	372		74	21
7:45-8:00								836	484		99	26
8:00-8:15								1045	593		122	33
8:15-8:30								1214	715		146	36
8:30-8:45								1385	805		174	45
8:45-9:00								1549	885		190	53
9:00-9:15								1719	958		210	58
9:15-9:30								1878	1014		224	64
9:30-9:45								2011	1068		243	72

ACTUAL TIME PERIOD VOLUME FIGURE

PERIOD	R1	S1	L1	TRR1	TRS1	TRL1	R2	S2	L2	TRR2	TRS2	TRL2
6:30-6:45	0		0	0		0	0	0		0	0	
6:45-7:00	55	0	15	4	0	0	12	90	0	0	8	0
7:00-7:15	60	0	15	4	0	1	12	108	0	1	9	0
7:15-7:30	99	0	18	9	0	0	13	138	0	1	18	0
7:30-7:45	150	0	15	6	0	3	11	174	0	0	13	0
7:45-8:00	162	0	12	7	0	1	13	183	0	0	16	0
8:00-8:15	141	0	17	14	0	0	8	160	0	1	10	0
8:15-8:30	97	0	10	6	0	1	15	133	0	0	20	0
8:30-8:45	117	0	10	1	0	1	8	174	0	0	8	0
8:45-9:00	78	0	9	12	0	0	12	150	0	2	20	0
9:00-9:15	81	0	9	15	0	2	9	133	0	2	15	0
9:15-9:30	63	0	4	8	0	0	8	131	0	0	11	0
9:30-9:45	62	0	6	5	0	2	9	138	0	1	12	0
TOTAL	1165	0	140	91	0	11	130	1712	0	8	160	0

LOCATION NUMBER = RD-#6
STREET NAME APPROACH #1= BROOKSBIE R
STREET NAME APPROACH #2= GREAT RD.
STREET NAME APPROACH #3=
STREET NAME APPROACH #4= GREAT RD.

COMMUNITY = BEOFORD
DATE COUNTED = 5/24/90
E' = = 6/04/90
E' = =
E' = =
E' = =

ACTUAL TIME PERIOD VOLUME FIGURE

PERIOD	R3	S3	L3	TRR3	TRS3	TRL3	R4	S4	L4	TRR4	TRS4	TRL4
6:30-6:45								0	0		0	0
6:45-7:00	0	0	0	0	0	0	0	150	80	0	15	5
7:00-7:15	0	0	0	0	0	0	0	159	83	0	16	6
7:15-7:30	0	0	0	0	0	0	0	161	105	0	22	5
7:30-7:45	0	0	0	0	0	0	0	177	104	0	21	5
7:45-8:00	0	0	0	0	0	0	0	189	112	0	25	5
8:00-8:15	0	0	0	0	0	0	0	209	109	0	23	7
8:15-8:30	0	0	0	0	0	0	0	169	122	0	24	3
8:30-8:45	0	0	0	0	0	0	0	171	90	0	28	9
8:45-9:00	0	0	0	0	0	0	0	164	80	0	16	8
9:00-9:15	0	0	0	0	0	0	0	170	73	0	20	5
9:15-9:30	0	0	0	0	0	0	0	159	56	0	14	6
9:30-9:45	0	0	0	0	0	0	0	133	54	0	19	8
TOTAL	0	0	0	0	0	0	0	2011	1068	0	243	72

ACTUAL TIME PERIOD VOLUME FIGURE

PERIOD	ENTER 1	EXIT	ENTER 2	EXIT	ENTER 3	EXIT	ENTER 4	EXIT
6:30-6:45	0	0	0	0	0	0	0	0
6:45-7:00	74	97	110	180	0	0	250	157
7:00-7:15	80	102	130	191	0	0	264	181
7:15-7:30	126	124	170	201	0	0	293	264
7:30-7:45	174	120	198	216	0	0	307	343
7:45-8:00	182	130	212	227	0	0	331	368
8:00-8:15	172	125	179	249	0	0	348	325
8:15-8:30	114	140	168	204	0	0	318	256
8:30-8:45	129	107	190	210	0	0	298	300
8:45-9:00	99	102	184	189	0	0	268	260
9:00-9:15	107	89	159	201	0	0	268	244
9:15-9:30	75	70	150	177	0	0	235	213
9:30-9:45	75	72	160	160	0	0	214	217
TOTAL	1407	1278	2010	2405	0	0	3394	3128

	APPROACH 1				APPROACH 2			
PERIOD	VOL	PHF	VOL T	% TKS	VOL	PHF	VOL T	% TKS
6:30-7:30	280	0.56	18	6.43	410	0.60	37	9.02
6:45-7:45	454	0.65	27	5.95	608	0.77	50	8.22
7:00-8:00	562	0.77	31	5.52	710	0.84	58	8.17
7:15-8:15	654	0.90	40	6.12	759	0.90	59	7.77
7:30-8:30	642	0.88	38	5.92	757	0.89	60	7.93
7:45-8:45	597	0.82	31	5.19	749	0.88	55	7.34
8:00-9:00	514	0.75	35	6.81	721	0.95	61	8.46
8:15-9:15	449	0.87	38	8.46	701	0.92	67	9.56
8:30-9:30	410	0.79	39	9.51	683	0.90	58	8.49
8:45-9:45	356	0.83	44	12.36	653	0.89	63	9.65

LOCATION NUMBER = RO-#6
STREET NAME APPROACH #1= BROOKSBI
STREET NAME APPROACH #2= GREAT RD
STREET NAME APPROACH #3=
STREET NAME APPROACH #4= GREAT RD

COMMUNITY = BEDFORD
DATE COUNTED = 5/24/90
E' = = 6/4/90
E' = =
E' = =
E' = =

CUMULATIVE VOLUME FIGURES

PERIOD	R1	S1	L1	TRR1	TRS1	TRL1	R2	S2	L2	TRR2	TRS2	TRL2
11:00-11:15	74		5	9		1	3	147		3	10	
11:15-11:30	122		14	17		6	8	330		4	23	
11:30-11:45	191		23	27		6	13	552		4	38	
11:45-12:00	291		34	37		6	22	696		5	46	
12:00-12:15	403		42	47		8	32	883		9	56	
12:15-12:30	502		49	55		8	44	1076		12	70	
12:30-12:45	579		55	65		8	55	1271		13	86	
12:45-1:00	680		74	71		8	72	1510		15	95	
1:00-1:15	760		80	93		9	86	1716		15	104	
1:15-1:30	838		92	103		10	100	1917		15	115	
N/A												
N/A												
N/A												

CUMULATIVE VOLUME FIGURES

PERIOD	R3	S3	L3	TRR3	TRS3	TRL3	R4	S4	L4	TRR4	TRS4	TRL4
11:00-11:15								165	75		23	11
11:15-11:30								335	146		58	19
11:30-11:45								565	222		85	26
11:45-12:00								769	308		122	33
12:00-12:15								1003	399		160	41
12:15-12:30								1202	469		186	48
12:30-12:45								1359	543		216	55
12:45-1:00								1590	603		236	66
1:00-1:15								1798	694		252	77
1:15-1:30								2000	761		272	84
N/A												
N/A												
N/A												

ACTUAL TIME PERIOD VOLUME FIGURE

PERIOD	R1	S1	L1	TRR1	TRS1	TRL1	R2	S2	L2	TRR2	TRS2	TRL2
11:00-11:15	74		5	9		1	3	147		3	10	
11:15-11:30	48	0	9	8	0	5	5	183	0	1	13	0
11:30-11:45	69	0	9	10	0	0	5	222	0	0	15	0
11:45-12:00	100	0	11	10	0	0	9	144	0	1	8	0
12:00-12:15	112	0	8	10	0	2	10	187	0	4	10	0
12:15-12:30	99	0	7	8	0	0	12	193	0	3	14	0
12:30-12:45	77	0	6	10	0	0	11	195	0	1	16	0
12:45-1:00	101	0	19	6	0	0	17	239	0	2	9	0
1:00-1:15	80	0	6	22	0	1	14	206	0	0	9	0
1:15-1:30	78	0	12	10	0	1	14	201	0	0	11	0
N/A												
N/A												
N/A												
TOTAL	838	0	92	103	0	10	100	1917	0	15	115	0

LOCATION NUMBER = RO-#6
STREET NAME APPROACH #1= BROOKSBI
STREET NAME APPROACH #2= GREAT RD
STREET NAME APPROACH #3=
STREET NAME APPROACH #4= GREAT RD

COMMUNITY = BEDFORD
DATE COUNTED = 5/24/90
E' = = 6/4/90
E' = =
E' = =
E' = =

ACTUAL TIME PERIOD VOLUME FIGURE

PERIOD	R3	S3	L3	TRR3	TRS3	TRL3	R4	S4	L4	TRR4	TRS4	TRL4
11:00-11:15								165	75		23	11
11:15-11:30	0	0	0	0	0	0	0	170	71	0	35	8
11:30-11:45	0	0	0	0	0	0	0	230	76	0	27	7
11:45-12:00	0	0	0	0	0	0	0	204	86	0	37	7
12:00-12:15	0	0	0	0	0	0	0	234	91	0	38	8
12:15-12:30	0	0	0	0	0	0	0	199	70	0	26	7
12:30-12:45	0	0	0	0	0	0	0	157	74	0	30	7
12:45-1:00	0	0	0	0	0	0	0	231	60	0	20	11
1:00-1:15	0	0	0	0	0	0	0	208	91	0	16	11
1:15-1:30	0	0	0	0	0	0	0	202	67	0	20	7
N/A												
N/A												
N/A												
TOTAL	0	0	0	0	0	0	0	2000	761	0	272	84

ACTUAL TIME PERIOD VOLUME FIGURE

PERIOD	ENTER 1	EXIT	ENTER 2	EXIT	ENTER 3	EXIT	ENTER 4	EXIT
11:00-11:15	89	92	163	194	0	0	274	240
11:15-11:30	70	85	202	219	0	0	284	252
11:30-11:45	88	88	242	266	0	0	340	316
11:45-12:00	121	103	162	252	0	0	334	262
12:00-12:15	132	113	211	282	0	0	371	319
12:15-12:30	114	92	222	232	0	0	302	314
12:30-12:45	93	93	223	193	0	0	268	298
12:45-1:00	126	90	267	270	0	0	322	355
1:00-1:15	109	116	229	231	0	0	326	317
1:15-1:30	101	88	226	235	0	0	296	300
N/A	0	0	0	0	0	0	0	0
N/A	0	0	0	0	0	0	0	0
N/A	0	0	0	0	0	0	0	0
TOTAL	1043	960	2147	2374	0	0	3117	2973

	APPROACH 1				APPROACH 2			
PERIOD	VOL	PHF	VOL T	% TKS	VOL	PHF	VOL T	% TKS
11:00-12:00	368	0.76	43	11.68	769	0.79	51	6.63
11:15-12:15	411	0.78	45	10.95	817	0.84	52	6.36
11:30-12:30	455	0.86	40	8.79	837	0.86	55	6.57
11:45-12:45	460	0.87	40	8.70	818	0.92	57	6.97
12:00-1:00	465	0.88	36	7.74	923	0.86	59	6.39
12:15-1:15	442	0.88	47	10.63	941	0.88	54	5.74
12:30-1:30	429	0.85	50	11.66	945	0.88	48	5.08
N/A								
N/A								
N/A								

LOCATION NUMBER = RO-#6
STREET NAME APPROACH #1= BROOKSBIE R
STREET NAME APPROACH #2= GREAT RD
STREET NAME APPROACH #3=
STREET NAME APPROACH #4= GREAT RD

COMMUNITY = BEDFORD
DATE COUNTED = 5/24/90
E' = = 6/04/90
E' = = 7/23/90
E' = =
E' = =

CUMULATIVE VOLUME FIGURES

PERIOD	R1	S1	L1	TRR1	TRS1	TRL1	R2	S2	L2	TRR2	TRS2	TRL2
2:30-2:45	0		0	0		0	0	0		0	0	
2:45-3:00	0		0	0		0	0	0		0	0	
3:00-3:15	78		11	9		0	10	188		1	10	
3:15-3:30	160		23	13		1	24	361		2	16	
3:30-3:45	237		28	25		1	32	544		3	29	
3:45-4:00	337		32	36		3	48	748		3	41	
4:00-4:15	413		38	45		3	59	980		3	52	
4:15-4:30	510		42	54		3	70	1167		3	59	
4:30-4:45	574		51	62		4	89	1309		5	62	
4:45-5:00	659		59	65		4	96	1450		5	70	
5:00-5:15	733		69	66		4	107	1606		5	70	
5:15-5:30	806		75	69		4	116	1742		5	74	
5:30-5:45	890		82	72		4	139	1934		5	78	
5:45-6:00	987		87	78		5	154	2121		5	79	
6:00-6:15	1103		94	80		5	168	2358		6	83	
6:15-6:30	1168		98	82		5	174	2565		6	85	

CUMULATIVE VOLUME FIGURES

PERIOD	R3	S3	L3	TRR3	TRS3	TRL3	R4	S4	L4	TRR4	TRS4	TRL4
2:30-2:45								0	0		0	0
2:45-3:00								0	0		0	0
3:00-3:15								151	83		13	9
3:15-3:30								356	160		31	21
3:30-3:45								557	250		51	33
3:45-4:00								730	336		74	40
4:00-4:15								926	447		83	53
4:15-4:30								1154	562		98	61
4:30-4:45								1352	692		109	66
4:45-5:00								1566	826		128	79
5:00-5:15								1767	966		139	90
5:15-5:30								1997	1076		156	95
5:30-5:45								2204	1199		165	102
5:45-6:00								2395	1311		170	104
6:00-6:15								2581	1391		178	109
6:15-6:30								2763	1459		187	109

ACTUAL TIME PERIOD VOLUME FIGURE

PERIOD	R1	S1	L1	TRR1	TRS1	TRL1	R2	S2	L2	TRR2	TRS2	TRL2
2:30-2:45	0		0	0		0	0	0		0	0	
2:45-3:00	0	0	0	0	0	0	0	0	0	0	0	0
3:00-3:15	78	0	11	9	0	0	10	188	0	1	10	0
3:15-3:30	82	0	12	4	0	1	14	173	0	1	6	0
3:30-3:45	77	0	5	12	0	0	8	183	0	1	13	0
3:45-4:00	100	0	4	11	0	2	16	204	0	0	12	0
4:00-4:15	76	0	6	9	0	0	11	232	0	0	11	0
4:15-4:30	97	0	4	9	0	0	11	187	0	0	7	0
4:30-4:45	64	0	9	8	0	1	19	142	0	2	3	0
4:45-5:00	85	0	8	3	0	0	7	141	0	0	8	0
5:00-5:15	74	0	10	1	0	0	11	156	0	0	0	0
5:15-5:30	73	0	6	3	0	0	9	136	0	0	4	0
5:30-5:45	84	0	7	3	0	0	23	192	0	0	4	0
5:45-6:00	97	0	5	6	0	1	15	187	0	0	1	0
6:00-6:15	116	0	7	2	0	0	14	237	0	1	4	0
6:15-6:30	65	0	4	2	0	0	6	207	0	0	2	0
TOTAL	1168	0	98	82	0	5	174	2565	0	6	85	0

LOCATION NUMBER = RO-#6
STREET NAME APPROACH #1= BROOKSBIE R
STREET NAME APPROACH #2= GREAT RO
STREET NAME APPROACH #3=
STREET NAME APPROACH #4= GREAT RO

COMMUNITY = BEDFORO
OATE COUNTED = 5/24/90
E' = = 6/04/90
E' = =
E' = =
E' = =

ACTUAL TIME PERIOD VOLUME FIGURE

PERIOD	R3	S3	L3	TRR3	TRS3	TRL3	R4	S4	L4	TRR4	TRS4	TRL4
2:30-2:45								0	0		0	0
2:45-3:00	0	0	0	0	0	0	0	0	0	0	0	0
3:00-3:15	0	0	0	0	0	0	0	151	83	0	13	9
3:15-3:30	0	0	0	0	0	0	0	205	77	0	18	12
3:30-3:45	0	0	0	0	0	0	0	201	90	0	20	12
3:45-4:00	0	0	0	0	0	0	0	173	86	0	23	7
4:00-4:15	0	0	0	0	0	0	0	196	111	0	9	13
4:15-4:30	0	0	0	0	0	0	0	228	115	0	15	8
4:30-4:45	0	0	0	0	0	0	0	198	130	0	11	5
4:45-5:00	0	0	0	0	0	0	0	214	134	0	19	13
5:00-5:15	0	0	0	0	0	0	0	201	140	0	11	11
5:15-5:30	0	0	0	0	0	0	0	230	110	0	17	5
5:30-5:45	0	0	0	0	0	0	0	207	123	0	9	7
5:45-6:00	0	0	0	0	0	0	0	191	112	0	5	2
6:00-6:15	0	0	0	0	0	0	0	186	80	0	8	5
6:15-6:30	0	0	0	0	0	0	0	182	68	0	9	0
TOTAL	0	0	0	0	0	0	0	2763	1459	0	187	109

ACTUAL TIME PERIOD VOLUME FIGURE

PERIOD	ENTER 1	EXIT	ENTER 2	EXIT	ENTER 3	EXIT	ENTER 4	EXIT
2:30-2:45	0	0	0	0	0	0	0	0
2:45-3:00	0	0	0	0	0	0	0	0
3:00-3:15	98	103	209	175	0	0	256	285
3:15-3:30	99	104	194	236	0	0	312	265
3:30-3:45	94	111	205	226	0	0	323	285
3:45-4:00	117	109	232	202	0	0	289	327
4:00-4:15	91	135	254	211	0	0	329	328
4:15-4:30	110	134	205	247	0	0	366	300
4:30-4:45	82	156	166	219	0	0	344	217
4:45-5:00	96	154	156	241	0	0	380	237
5:00-5:15	85	162	167	222	0	0	363	231
5:15-5:30	82	124	149	253	0	0	362	216
5:30-5:45	94	153	219	223	0	0	346	283
5:45-6:00	109	129	203	202	0	0	310	291
6:00-6:15	125	100	256	201	0	0	279	359
6:15-6:30	71	74	215	195	0	0	259	276
TOTAL	1353	1748	2830	3053	0	0	4518	3900

	APPROACH 1				APPROACH 2			
PERIOD	VOL	PHF	VOL T	% TKS	VOL	PHF	VOL T	% TKS
2:30-3:30	197	0.50	14	7.11	403	0.48	18	4.47
2:45-3:45	291	0.73	26	8.93	608	0.73	32	5.26
3:00-4:00	408	0.87	39	9.56	840	0.91	44	5.24
3:15-4:15	401	0.86	39	9.73	885	0.87	44	4.97
3:30-4:30	412	0.88	43	10.44	896	0.88	44	4.91
3:45-4:45	400	0.85	40	10.00	857	0.84	35	4.08
4:00-5:00	379	0.86	30	7.92	781	0.77	31	3.97
4:15-5:15	373	0.85	22	5.90	694	0.85	20	2.88
4:30-5:30	345	0.90	16	4.64	638	0.96	17	2.66
4:45-5:45	357	0.93	10	2.80	691	0.79	16	2.32
5:00-6:00	370	0.85	14	3.78	738	0.84	9	1.22
5:15-6:15	410	0.82	15	3.66	827	0.81	14	1.69
5:30-6:30	399	0.80	14	3.51	893	0.87	12	1.34

B-3

LOCATION NUMBER = B-3
STREET NAME APPROACH #1= loomis st.
STREET NAME APPROACH #2= bedford st.
STREET NAME APPROACH #3= b. auto par
STREET NAME APPROACH #4= bedford st.

COMMUNITY = bedford
DATE COUNTED = 6/12/90
e' = = 7/3/90
e' = = 7/23/90
e' = =
e' = =

CUMULATIVE VOLUME FIGURES

PERIOD	R1	S1	L1	TRR1	TRS1	TRL1	R2	S2	L2	TRR2	TRS2	TRL2
6:30-6:45	0	0	0	0			0	0	0	0	0	0
6:45-7:00	21	0	0	2			1	155	0	0	3	0
7:00-7:15	50	0	0	8			2	470	0	0	8	0
7:15-7:30	113	0	0	10			2	715	0	0	17	0
7:30-7:45	176	0	0	13			2	1041	0	0	22	0
7:45-8:00	234	0	0	20			2	1430	0	0	26	0
8:00-8:15	284	0	0	29			3	1766	1	0	28	0
8:15-8:30	334	1	0	31			3	2102	1	0	34	0
8:30-8:45	375	1	0	42			5	2341	2	0	41	0
8:45-9:00	419	2	0	45			7	2563	2	0	45	0
9:00-9:15	457	3	1	53			11	2755	3	0	46	0
9:15-9:30	490	4	1	55			14	2916	6	0	53	0
9:30-9:45	531	4	1	57			18	3103	8	2	65	0

CUMULATIVE VOLUME FIGURES

PERIOD	R3	S3	L3	TRR3	TRS3	TRL3	R4	S4	L4	TRR4	TRS4	TRL4
6:30-6:45	0	0	0	0	0	0	0	0	0	0	0	0
6:45-7:00	0	0	0	0	0	0	1	92	40	0	3	1
7:00-7:15	0	0	0	0	0	0	1	194	78	0	10	3
7:15-7:30	0	1	5	0	0	0	4	330	144	0	20	6
7:30-7:45	0	1	5	0	0	0	6	449	225	1	26	13
7:45-8:00	0	1	5	0	0	0	9	667	297	2	32	18
8:00-8:15	0	1	5	0	0	0	12	815	350	2	38	20
8:15-8:30	0	1	5	0	0	0	14	942	402	2	48	24
8:30-8:45	2	1	7	0	0	0	15	1111	461	2	51	29
8:45-9:00	2	1	8	0	0	0	16	1246	503	2	69	37
9:00-9:15	3	2	12	0	0	0	19	1399	522	2	89	40
9:15-9:30	5	2	13	0	0	0	24	1563	558	2	94	40
9:30-9:45	7	3	14	0	0	0	28	1715	604	3	110	43

ACTUAL TIME PERIOD VOLUME FIGURE

PERIOD	R1	S1	L1	TRR1	TRS1	TRL1	R2	S2	L2	TRR2	TRS2	TRL2
6:30-6:45	0	0	0	0			0	0	0	0	0	0
6:45-7:00	21	0	0	2	0	0	1	155	0	0	3	0
7:00-7:15	29	0	0	6	0	0	1	315	0	0	5	0
7:15-7:30	63	0	0	2	0	0	0	245	0	0	9	0
7:30-7:45	65	0	0	3	0	0	0	346	0	0	5	0
7:45-8:00	58	0	0	7	0	0	0	339	0	0	4	0
8:00-8:15	50	0	0	9	0	0	1	356	1	0	2	0
8:15-8:30	50	1	0	2	0	0	0	336	0	0	9	0
8:30-8:45	45	0	0	11	0	0	3	239	1	0	5	0
8:45-9:00	40	1	0	3	0	0	1	222	0	0	4	0
9:00-9:15	33	1	1	8	0	0	4	192	1	0	1	0
9:15-9:30	33	1	0	2	0	0	3	161	3	0	7	0
9:30-9:45	41	0	0	2	0	0	4	192	2	2	12	0
TOTAL	531	4	1	57	0	0	18	3103	8	2	65	0

LOCATION NUMBER = 6-3
STREET NAME APPROACH #1= loomis st.
STREET NAME APPROACH #2= bedford st.
STREET NAME APPROACH #3= b. auto par
STREET NAME APPROACH #4= bedford st.

COMMUNITY = lexingto
DATE COUNTED = 6/7/90
e' = = 6/8/90
e' = =
e' = =
e' = =

ACTUAL TIME PERIOD VOLUME FIGURE

PERIOD	R3	S3	L3	TRR3	TRS3	TRL3	R4	S4	L4	TRR4	TRS4	TRL4
6:30-6:45	0	0	0	0	0	0	0	0	0	0	0	0
6:45-7:00	0	0	0	0	0	0	1	82	40	0	3	1
7:00-7:15	0	0	0	0	0	0	0	112	39	0	7	2
7:15-7:30	0	1	5	0	0	0	3	136	66	0	12	3
7:30-7:45	0	0	0	0	0	0	2	119	81	1	4	7
7:45-8:00	0	0	0	0	0	0	3	218	72	1	6	5
8:00-8:15	0	1	0	0	0	0	3	143	53	0	6	2
8:15-8:30	0	0	1	0	0	0	2	127	52	0	10	4
8:30-8:45	2	0	1	0	0	0	1	169	59	0	3	5
8:45-9:00	0	0	1	0	0	0	1	135	42	0	18	8
9:00-9:15	1	1	4	0	0	0	3	153	19	0	19	3
9:15-9:30	3	0	1	0	0	0	5	164	29	0	6	0
9:30-9:45	1	1	1	0	0	0	4	152	54	1	16	3
TOTAL	7	3	14	0	0	0	28	1715	604	3	110	43

ACTUAL TIME PERIOD VOLUME FIGURE

PERIOD	ENTER 1	EXIT	ENTER 2	EXIT	ENTER 3	EXIT	ENTER 4	EXIT
6:30-6:45	0	0	0	0	0	0	0	0
6:45-7:00	23	42	159	95	0	1	127	181
7:00-7:15	35	41	321	119	0	0	159	355
7:15-7:30	65	70	254	148	6	3	220	324
7:30-7:45	68	89	351	123	0	3	214	419
7:45-8:00	63	77	343	224	0	4	305	405
8:00-8:15	59	55	370	154	0	4	212	427
8:15-8:30	53	56	344	137	1	3	195	397
8:30-8:45	56	67	243	174	3	2	237	301
8:45-9:00	44	51	227	153	1	2	204	270
9:00-9:15	48	27	198	174	6	5	197	243
9:15-9:30	36	31	174	173	4	9	203	204
9:30-9:45	43	64	212	169	3	7	230	248
TOTAL	593	570	3201	1733	24	43	2503	3775

	APPROACH 1				APPROACH 2			
PERIOD	VOL	PHF	VOL T	% TKS	VOL	PHF	VOL T	% TKS
6:30-7:30	123	0.47	10	8.13	734	0.57	17	2.32
6:45-7:45	191	0.70	13	6.81	1095	0.77	22	2.03
7:00-8:00	231	0.85	18	7.79	1269	0.90	23	1.91
7:15-8:15	255	0.94	21	8.24	1319	0.99	20	1.52
7:30-8:30	243	0.89	21	8.64	1409	0.95	19	1.35
7:45-8:45	221	0.92	29	12.55	1395	0.98	19	1.46
8:00-9:00	212	0.90	25	11.79	1189	0.90	19	1.59
8:15-9:15	201	0.90	24	11.94	1017	0.74	19	1.77
8:30-9:30	184	0.82	24	13.04	847	0.95	17	2.01
8:45-9:45	171	0.89	15	8.77	811	0.89	26	3.21

LOCATION NUMBER = B-3
STREET NAME APPROACH #1= LOOMIS S
STREET NAME APPROACH #2= GREAT RD
STREET NAME APPROACH #3= B.AUTO P
STREET NAME APPROACH #4= GREAT RD

COMMUNITY = BEDFORD
DATE COUNTED = 6/12/90
E' = = 6/29/90
E' = = 7/23/90
E' = =
E' = =

CUMULATIVE VOLUME FIGURES

PERIOD	R1	S1	L1	TRR1	TRS1	TRL1	R2	S2	L2	TRR2	TRS2	TRL2
11:00-11:15	45	0	2	3	0	0	3	134	3	0	0	0
11:15-11:30	90	0	2	8	0	0	8	296	5	0	8	0
11:30-11:45	169	3	2	14	0	0	14	492	7	0	12	0
11:45-12:00	224	3	7	18	0	1	15	683	9	1	23	0
12:00-12:15	295	3	9	20	0	2	18	877	11	1	29	0
12:15-12:30	345	3	12	21	0	2	21	1082	13	1	36	0
12:30-12:45	396	4	12	28	0	2	25	1286	14	1	44	0
12:45-1:00	458	4	14	31	0	2	30	1510	15	2	49	0
1:00-1:15	513	5	14	35	0	2	31	1689	17	3	54	0
1:15-1:30	562	6	14	37	0	2	35	1868	20	5	62	0
N/A												
N/A												
N/A												

CUMULATIVE VOLUME FIGURES

PERIOD	R3	S3	L3	TRR3	TRS3	TRL3	R4	S4	L4	TRR4	TRS4	TRL4
11:00-11:15	1	1	2	0	0	0	2	166	41	0	5	1
11:15-11:30	4	1	5	0	0	0	6	352	72	0	11	3
11:30-11:45	9	3	6	0	0	0	11	550	112	0	18	6
11:45-12:00	12	3	7	0	0	0	13	723	163	1	25	9
12:00-12:15	14	4	11	0	0	0	25	924	222	1	31	11
12:15-12:30	20	4	13	0	0	0	31	1118	290	1	36	14
12:30-12:45	21	5	18	0	0	0	37	1349	338	2	39	18
12:45-1:00	21	6	24	0	0	0	43	1529	386	2	46	23
1:00-1:15	23	6	26	0	0	0	48	1732	442	3	54	24
1:15-1:30	28	6	29	0	0	0	52	1929	487	3	56	28
N/A												
N/A												
N/A												

ACTUAL TIME PERIOD VOLUME FIGURE

PERIOD	R1	S1	L1	TRR1	TRS1	TRL1	R2	S2	L2	TRR2	TRS2	TRL2
11:00-11:15	45	0	2	3	0	0	3	134	3	0	0	0
11:15-11:30	45	0	0	5	0	0	5	162	2	0	8	0
11:30-11:45	79	3	0	6	0	0	6	196	2	0	4	0
11:45-12:00	55	0	5	4	0	1	1	191	2	1	11	0
12:00-12:15	71	0	2	2	0	1	3	194	2	0	6	0
12:15-12:30	50	0	3	1	0	0	3	205	2	0	7	0
12:30-12:45	51	1	0	7	0	0	4	204	1	0	8	0
12:45-1:00	62	0	2	3	0	0	5	224	1	1	5	0
1:00-1:15	55	1	0	4	0	0	1	179	2	1	5	0
1:15-1:30	49	1	0	2	0	0	4	179	3	2	8	0
N/A												
N/A												
N/A												
TOTAL	562	6	14	37	0	2	35	1868	20	5	62	0

LOCATION NUMBER = B-3
STREET NAME APPROACH #1= LOOMIS S
STREET NAME APPROACH #2= BEDFORD
STREET NAME APPROACH #3= B.AUTO P
STREET NAME APPROACH #4= BEDFORD

COMMUNITY = BEDFORD
DATE COUNTED = 6/12/90
E' = = 6/29/90
E' = =
E' = =
E' = =

ACTUAL TIME PERIOD VOLUME FIGURE

PERIOD	R3	S3	L3	TRR3	TRS3	TRL3	R4	S4	L4	TRR4	TRS4	TRL4
11:00-11:15	1	1	2	0	0	0	2	166	41	0	5	1
11:15-11:30	3	0	3	0	0	0	4	186	31	0	6	2
11:30-11:45	5	2	1	0	0	0	5	198	40	0	7	3
11:45-12:00	3	0	1	0	0	0	2	173	51	1	7	3
12:00-12:15	2	1	4	0	0	0	12	201	59	0	6	2
12:15-12:30	6	0	2	0	0	0	6	194	68	0	5	3
12:30-12:45	1	1	5	0	0	0	6	231	48	1	3	4
12:45-1:00	0	1	6	0	0	0	6	180	48	0	7	5
1:00-1:15	2	0	2	0	0	0	5	203	56	1	8	1
1:15-1:30	5	0	3	0	0	0	4	197	45	0	2	4
N/A												
N/A												
N/A												
TOTAL	28	6	29	0	0	0	52	1929	487	3	56	28

ACTUAL TIME PERIOD VOLUME FIGURE

PERIOD	ENTER 1	EXIT	ENTER 2	EXIT	ENTER 3	EXIT	ENTER 4	EXIT
11:00-11:15	50	46	140	174	4	5	215	184
11:15-11:30	50	38	177	195	6	6	229	223
11:30-11:45	88	51	208	210	8	10	253	286
11:45-12:00	65	56	206	189	4	5	237	262
12:00-12:15	76	65	205	212	7	14	280	277
12:15-12:30	54	74	217	208	8	8	276	265
12:30-12:45	59	57	217	235	7	9	293	275
12:45-1:00	67	60	236	189	7	7	246	300
1:00-1:15	60	59	188	213	4	9	274	245
1:15-1:30	52	55	196	204	8	8	252	241
N/A	0	0	0	0	0	0	0	0
N/A	0	0	0	0	0	0	0	0
N/A	0	0	0	0	0	0	0	0
TOTAL	621	561	1990	2029	63	81	2555	2558

	APPROACH 1				APPROACH 2			
PERIOD	VOL	PHF	VOL T	% TKS	VOL	PHF	VOL T	% TKS
11:00-12:00	253	0.72	19	7.51	731	0.88	24	3.28
11:15-12:15	279	0.79	19	6.81	796	0.96	30	3.77
11:30-12:30	283	0.80	15	5.30	836	0.96	29	3.47
11:45-12:45	254	0.84	16	6.30	845	0.97	33	3.91
12:00-1:00	256	0.84	14	5.47	875	0.93	27	3.09
12:15-1:15	240	0.90	15	6.25	858	0.91	27	3.15
12:30-1:30	238	0.89	16	6.72	837	0.89	30	3.58
N/A								
N/A								
N/A								

LOCATION NUMBER = b-3
STREET NAME APPROACH #1= loomis st
STREET NAME APPROACH #2= bedford st.
STREET NAME APPROACH #3= bauto parts
STREET NAME APPROACH #4= bedford st.

COMMUNITY = bedford
DATE COUNTED = 6/12/90
e' = = 7/5/90
e' = =
e' = =
e' = =

CUMULATIVE VOLUME FIGURES

PERIOD	R1	S1	L1	TRR1	TRS1	TRL1	R2	S2	L2	TRR2	TRS2	TRL2
2:30-2:45	0	0	0	0	0	0	0	0	0	0	0	0
2:45-3:00	0	0	0	0	0	0	0	0	0	0	0	0
3:00-3:15	49	0	2	3	0	0	0	159	3	1	5	1
3:15-3:30	87	0	2	5	0	0	0	339	4	1	12	1
3:30-3:45	163	0	2	9	0	0	2	570	5	1	14	1
3:45-4:00	217	0	3	10	0	0	5	769	6	1	19	1
4:00-4:15	272	0	3	12	0	0	8	995	6	1	22	1
4:15-4:30	336	0	4	14	0	0	12	1200	6	1	24	1
4:30-4:45	421	0	4	18	0	0	22	1394	6	1	26	1
4:45-5:00	516	1	5	19	1	0	23	1613	6	2	30	1
5:00-5:15	596	2	5	20	1	0	25	1843	6	2	34	1
5:15-5:30	669	2	6	20	1	0	25	2065	6	2	35	1
5:30-5:45	741	3	7	21	1	0	25	2277	6	2	35	1
5:45-6:00	802	3	9	24	1	0	31	2453	7	2	36	1
6:00-6:15	864	3	9	26	1	0	35	2638	9	2	37	2
6:15-6:30	907	3	11	26	1	0	39	2825	11	2	41	2

CUMULATIVE VOLUME FIGURES

PERIOD	R3	S3	L3	TRR3	TRS3	TRL3	R4	S4	L4	TRR4	TRS4	TRL4
2:30-2:45	0	0	0	0	0	0	0	0	0	0	0	0
2:45-3:00	0	0	0	0	0	0	0	0	0	0	0	0
3:00-3:15	3	1	4	0	0	0	8	178	32	0	7	2
3:15-3:30	5	1	8	0	0	0	10	407	64	0	9	4
3:30-3:45	9	1	9	0	0	0	17	646	107	0	21	11
3:45-4:00	10	1	9	0	0	0	22	816	169	0	27	13
4:00-4:15	12	2	9	0	0	0	25	1073	183	1	30	15
4:15-4:30	14	3	11	0	0	0	30	1333	227	1	33	20
4:30-4:45	15	3	11	0	0	0	32	1595	269	1	37	20
4:45-5:00	17	3	14	0	0	0	32	1892	331	1	40	21
5:00-5:15	19	6	16	0	0	0	32	2129	334	1	43	22
5:15-5:30	23	8	17	0	0	0	37	2392	439	1	44	23
5:30-5:45	24	8	19	0	0	0	36	2641	499	1	49	24
5:45-6:00	25	9	20	0	0	0	38	2901	570	1	51	27
6:00-6:15	28	10	20	0	0	0	41	3177	635	1	53	28
6:15-6:30	31	11	25	0	0	0	43	3490	675	1	56	29

ACTUAL TIME PERIOD VOLUME FIGURE

PERIOD	R1	S1	L1	TRR1	TRS1	TRL1	R2	S2	L2	TRR2	TRS2	TRL2
2:30-2:45	0	0	0	0	0	0	0	0	0	0	0	0
2:45-3:00	0	0	0	0	0	0	0	0	0	0	0	0
3:00-3:15	49	0	2	3	0	0	0	159	3	1	5	1
3:15-3:30	38	0	0	2	0	0	0	180	1	0	7	0
3:30-3:45	76	0	0	4	0	0	2	231	1	0	2	0
3:45-4:00	54	0	1	1	0	0	4	199	1	0	5	0
4:00-4:15	55	0	0	2	0	0	2	216	0	0	3	0
4:15-4:30	64	0	1	2	0	0	2	215	0	0	2	0
4:30-4:45	85	0	0	4	0	0	12	194	0	0	2	0
4:45-5:00	95	1	1	1	1	0	1	219	0	1	4	0
5:00-5:15	80	1	0	1	0	0	2	230	0	0	4	0
5:15-5:30	72	0	1	0	0	0	0	222	0	0	1	0
5:30-5:45	73	1	1	1	1	0	0	212	0	0	0	0
5:45-6:00	61	0	2	2	0	0	5	176	1	0	1	0
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

LOCATION NUMBER = b-3
STREET NAME APPROACH #1= loomis st
STREET NAME APPROACH #2= bedford st.
STREET NAME APPROACH #3= bauto parts
STREET NAME APPROACH #4= bedford st.

COMMUNITY = lexingto
DATE COUNTED = 6/7/90
e' = = 6/8/90
e' = =
e' = =
e' = =

ACTUAL TIME PERIOD VOLUME FIGURE

PERIOD	R3	S3	L3	TRR3	TRS3	TRL3	R4	S4	L4	TRR4	TRS4	TRL4
2:30-2:45	0	0	0	0	0	0	0	0	0	0	0	0
2:45-3:00	0	0	0	0	0	0	0	0	0	0	0	0
3:00-3:15	3	1	4	0	0	0	9	178	32	0	7	2
3:15-3:30	2	0	4	0	0	0	2	229	32	0	2	2
3:30-3:45	4	0	1	0	0	0	7	239	43	0	12	7
3:45-4:00	1	0	0	0	0	0	5	170	73	0	6	2
4:00-4:15	2	1	0	0	0	0	4	257	3	1	3	2
4:15-4:30	2	1	2	0	0	0	4	269	44	0	3	5
4:30-4:45	1	0	0	0	0	0	2	262	40	0	4	0
4:45-5:00	2	0	3	0	0	0	0	297	64	0	3	1
5:00-5:15	2	3	2	0	0	0	0	236	53	0	3	1
5:15-5:30	4	2	1	0	0	0	1	264	55	0	1	1
5:30-5:45	1	0	2	0	0	0	3	249	59	0	5	1
5:45-6:00	1	1	1	0	0	0	2	260	72	0	2	3
6:00-6:15	3	1	3	0	0	0	3	275	65	0	2	1
6:15-6:30	3	1	5	0	0	0	2	223	40	0	3	1
TOTAL	31	11	25	0	0	0	43	3400	575	1	56	29

ACTUAL TIME PERIOD VOLUME FIGURE

PERIOD	ENTER 1	EXIT	ENTER 2	EXIT	ENTER 3	EXIT	ENTER 4	EXIT
2:30-2:45	0	0	0	0	0	0	0	0
2:45-3:00	0	0	0	0	0	0	0	0
3:00-3:15	54	36	169	190	9	12	227	220
3:15-3:30	40	34	183	233	6	3	267	231
3:30-3:45	30	52	236	255	5	8	309	314
3:45-4:00	56	79	209	173	1	6	256	259
4:00-4:15	57	8	221	262	3	5	270	276
4:15-4:30	67	52	219	266	5	4	314	295
4:30-4:45	89	52	208	267	1	2	308	285
4:45-5:00	99	67	225	303	5	2	365	322
5:00-5:15	82	59	235	241	7	1	293	317
5:15-5:30	73	59	223	270	7	1	322	296
5:30-5:45	70	60	212	256	3	4	317	293
5:45-6:00	66	82	184	265	3	5	339	242
6:00-6:15	64	72	194	291	4	5	347	250
6:15-6:30	45	44	195	231	3	4	269	239
TOTAL	948	755	2919	3182	67	61	4204	3824

	APPROACH 1				APPROACH 2			
PERIOD	VOL	PHF	VOL T	% TKS	VOL	PHF	VOL T	% TKS
2:30-3:30	94	0.44	5	5.32	357	0.67	14	3.92
2:45-3:45	174	0.54	9	5.17	593	0.83	16	2.70
3:00-4:00	230	0.72	10	4.35	802	0.85	21	2.62
3:15-4:15	233	0.73	9	3.86	854	0.90	17	1.99
3:30-4:30	260	0.81	9	3.46	885	0.94	12	1.36
3:45-4:45	269	0.76	9	3.35	857	0.97	12	1.40
4:00-5:00	312	0.79	10	3.21	873	0.97	12	1.37
4:15-5:15	337	0.85	9	2.67	889	0.94	13	1.45
4:30-5:30	343	0.87	7	2.04	842	0.94	12	1.35
4:45-5:45	330	0.83	4	1.21	896	0.95	10	1.12
5:00-6:00	297	0.91	5	1.68	855	0.91	6	0.70

LOCATION NUMBER = B10
STREET NAME APPROACH #1= BACON ROAD
STREET NAME APPROACH #2= GREAT ROAD
STREET NAME APPROACH #3= HILLSIOE AV
STREET NAME APPROACH #4= GREAT ROAO

COMMUNITY = BEOFORD
OATE COUNTED = 6/14/90
E' = = 7/3/90
E' = =
E' = =
E' = =

CUMULATIVE VOLUME FIGURES

PERIOO	R1	S1	L1	TRR1	TRS1	TRL1	R2	S2	L2	TRR2	TRS2	TRL2
6:30-6:45	0	0	0	0	0	0	0	0	0	0	0	0
6:45-7:00	0	0	0	1	0	1	1	163	0	0	1	0
7:00-7:15	3	0	0	1	0	1	2	410	2	0	6	0
7:15-7:30	5	0	0	1	0	1	3	662	4	0	12	0
7:30-7:45	6	1	0	1	0	1	4	928	4	0	16	0
7:45-8:00	9	2	1	1	0	1	8	1195	6	0	20	0
8:00-8:15	12	3	1	1	0	2	12	1461	9	0	27	0
8:15-8:30	16	4	2	1	0	2	14	1727	10	0	34	0
8:30-8:45	22	4	2	1	0	2	17	1956	13	0	44	0
8:45-9:00	25	7	2	1	0	3	21	2186	15	0	51	0
9:00-9:15	28	8	2	2	0	3	23	2381	18	0	55	0
9:15-9:30	44	8	2	2	1	3	23	2558	19	0	67	0
9:30-9:45	53	9	3	2	1	3	25	2737	22	0	76	0

CUMULATIVE VOLUME FIGURES

PERIOD	R3	S3	L3	TRR3	TRS3	TRL3	R4	S4	L4	TRR4	TRS4	TRL4
6:30-6:45	0	0	0	0	0	0	0	0	0	0	0	0
6:45-7:00	2	3	27	0	1	0	19	54	7	1	3	1
7:00-7:15	2	5	59	0	1	1	38	122	16	4	8	1
7:15-7:30	4	10	87	0	1	2	89	207	18	7	18	1
7:30-7:45	5	13	136	0	1	3	131	309	22	8	26	1
7:45-8:00	5	16	179	0	1	3	178	419	28	8	36	1
8:00-8:15	12	22	225	0	1	3	211	511	30	10	49	1
8:15-8:30	13	23	257	0	2	4	242	618	38	14	58	2
8:30-8:45	15	27	288	0	2	5	277	744	45	15	68	2
8:45-9:00	16	28	309	1	2	6	302	854	53	15	83	3
9:00-9:15	18	29	332	2	2	6	334	946	61	17	95	4
9:15-9:30	20	31	358	3	2	6	357	1037	67	21	103	4
9:30-9:45	21	32	394	3	2	6	370	1158	79	22	113	4

ACTUAL TIME PERIOO VOLUME FIGURE

PERIOO	R1	S1	L1	TRR1	TRS1	TRL1	R2	S2	L2	TRR2	TRS2	TRL2
6:30-6:45	0	0	0	0	0	0	0	0	0	0	0	0
6:45-7:00	0	0	0	1	0	1	1	163	0	0	1	0
7:00-7:15	3	0	0	0	0	0	1	247	2	0	5	0
7:15-7:30	2	0	0	0	0	0	1	252	2	0	6	0
7:30-7:45	1	1	0	0	0	0	1	266	0	0	4	0
7:45-8:00	3	1	1	0	0	0	4	267	2	0	4	0
8:00-8:15	3	1	0	0	0	1	4	266	3	0	7	0
8:15-8:30	4	1	1	0	0	0	2	266	1	0	7	0
8:30-8:45	6	0	0	0	0	0	3	229	3	0	10	0
8:45-9:00	3	3	0	0	0	1	4	230	2	0	7	0
9:00-9:15	3	1	0	1	0	0	2	195	3	0	4	0
9:15-9:30	16	0	0	0	1	0	0	177	1	0	12	0
9:30-9:45	9	1	1	0	0	0	2	179	3	0	9	0
TOTAL	53	9	3	2	1	3	25	2737	22	0	76	0

LOCATION NUMBER = 810
STREET NAME APPROACH #1= BACON ROAD
STREET NAME APPROACH #2= GREAT ROAD
STREET NAME APPROACH #3= HILLSIDE AV
STREET NAME APPROACH #4= GREAT ROAD

COMMUNITY = BEDFORD
DATE COUNTED = 6/14/90
E* = = 7/3/90
E* = =
E* = =
E* = =

ACTUAL TIME PERIOD VOLUME FIGURE

PERIOD	R3	S3	L3	TRR3	TRS3	TRL3	R4	S4	L4	TRR4	TRS4	TRL4
6:30-6:45	0	0	0	0	0	0	0	0	0	0	0	0
6:45-7:00	2	3	27	0	1	0	19	54	7	1	3	1
7:00-7:15	0	2	32	0	0	1	19	68	9	3	5	0
7:15-7:30	2	5	28	0	0	1	51	85	2	3	10	0
7:30-7:45	1	3	49	0	0	1	42	102	4	1	8	0
7:45-8:00	3	3	43	0	0	0	47	110	6	0	10	0
8:00-8:15	4	6	46	0	0	0	33	92	2	2	13	0
8:15-8:30	1	1	32	0	1	1	31	107	8	4	9	1
8:30-8:45	2	4	31	0	0	1	35	126	7	1	10	0
8:45-9:00	1	1	21	1	0	1	25	110	8	0	15	1
9:00-9:15	2	1	23	1	0	0	32	92	8	2	12	1
9:15-9:30	2	2	26	1	0	0	23	91	6	4	8	0
9:30-9:45	1	1	36	0	0	0	13	121	12	1	10	0
TOTAL	21	32	394	3	2	6	370	1158	79	22	113	4

ACTUAL TIME PERIOD VOLUME FIGURE

PERIOD	ENTER 1	EXIT	ENTER 2	EXIT	ENTER 3	EXIT	ENTER 4	EXIT
6:30-6:45	0	0	0	0	0	0	0	0
6:45-7:00	2	13	165	60	33	20	85	192
7:00-7:15	3	12	255	73	35	24	104	288
7:15-7:30	2	8	261	97	36	56	151	289
7:30-7:45	2	8	271	111	54	44	157	321
7:45-8:00	5	13	277	124	49	50	173	317
8:00-8:15	5	12	280	110	56	39	142	322
8:15-8:30	6	13	276	118	36	37	160	310
8:30-8:45	6	14	245	138	38	39	179	277
8:45-9:00	7	14	243	128	25	30	159	262
9:00-9:15	5	12	204	107	27	38	147	226
9:15-9:30	17	8	190	102	31	29	132	231
9:30-9:45	11	15	193	133	38	18	157	233
TOTAL	71	142	2860	1301	458	424	1746	3268

	APPROACH 1				APPROACH 2			
PERIOD	VOL	PHF	VOL T	% TKS	VOL	PHF	VOL T	% TKS
6:30-7:30	7	0.58	2	28.57	681	0.65	12	1.76
6:45-7:45	9	0.75	2	22.22	952	0.88	16	1.68
7:00-8:00	12	0.60	0	0.00	1064	0.96	19	1.79
7:15-8:15	14	0.70	1	7.14	1089	0.97	21	1.93
7:30-8:30	18	0.75	1	5.56	1104	0.99	22	1.99
7:45-8:45	22	0.92	1	4.55	1078	0.96	28	2.60
8:00-9:00	24	0.86	2	8.33	1044	0.93	31	2.97
8:15-9:15	24	0.86	2	8.33	968	0.88	28	2.89
8:30-9:30	35	0.51	3	8.57	882	0.90	33	3.74
8:45-9:45	40	0.59	3	7.50	830	0.85	32	3.86

LOCATION NUMBER = B10
STREET NAME APPROACH #1= BACON ROAD
STREET NAME APPROACH #2= GREAT ROAD
STREET NAME APPROACH #3= HILLSIDE AV
STREET NAME APPROACH #4= GREAT ROAD

COMMUNITY = BEDFORD
DATE COUNTED = 6/14/90
E' = = 7/3/90
E' = =
E' = =
E' = =

	APPROACH 3				APPROACH 4				INTERSECTION APP. PEAK HR. VOLUME		
PERIOD	VOL	PHF	VOL T	% TKS	VOL	PHF	VOL T	% TKS	/PEAK HOUR		1949
6:30-7:30	104	0.72	3	2.88	340	0.56	26	7.65	1132	0.63	
6:45-7:45	158	0.73	4	2.53	497	0.79	35	7.04	1616	0.83	
7:00-8:00	174	0.81	3	1.72	585	0.85	40	6.84	1835	0.91	
7:15-8:15	195	0.87	2	1.03	623	0.90	47	7.54	1921	0.95	
7:30-8:30	195	0.87	3	1.54	632	0.91	48	7.59	1949	0.97	
7:45-8:45	179	0.80	3	1.68	654	0.91	50	7.65	1933	0.96	
8:00-9:00	155	0.69	5	3.23	640	0.89	56	8.75	1863	0.96	
8:15-9:15	126	0.83	6	4.76	645	0.90	56	8.68	1763	0.92	
8:30-9:30	121	0.80	5	4.13	617	0.86	54	8.75	1655	0.88	
8:45-9:45	121	0.80	4	3.31	595	0.94	54	9.08	1586	0.91	

	APPRO. 1			APPRO. 2			APPRO 3.			APPRO. 4		
PERIOD	R	S	L	R	S	L	R	S	L	R	S	L
6:30-7:30	6	0	1	3	674	4	4	11	89	96	225	19
6:45-7:45	7	1	1	4	944	4	5	14	139	139	335	23
7:00-8:00	9	2	1	7	1051	6	6	13	155	166	398	21
7:15-8:15	9	3	2	10	1072	7	10	17	168	179✓	430	14
7:30-8:30	11	4	3	11	1087✓	6	9	14	172✓	160	451	21
7:45-8:45	16	3	3	13	1056	9	10	15	154	153	477	24
8:00-9:00	16	5	3	13	1022	9	9	13	133	131	482✓	27
8:15-9:15	17	5	2	11	949	9	8	8	110	130	481	34
8:30-9:30	29	5	1	9	864	9	10	8	103	122	464	31
8:45-9:45	32	6	2	8	813	9	9	5	107	100	459	36
TOTAL	55	10	6	25	2813	22	24	34	400	392	1271	83

	EXIT	VOL.ENTER APP 1	EXIT	VOL.ENTER APP 2	EXIT	VOL.ENTER APP 3	EXIT	VOL.ENTER APP 4
PERIOD								
6:30-7:30	33	7	230	681	100	104	769	340
6:45-7:45	41	9	341	952	144	158	1090	497
7:00-8:00	41	12	405	1064	174	174	1215	585
7:15-8:15	41	14	442	1089	189	195	1249	623
7:30-8:30	46	18	463	1104	170	195	1270	632
7:45-8:45	52	22	490	1078	165	179	1226	654
8:00-9:00	53	24	494	1044	145	155	1171	640
8:15-9:15	53	24	491	968	144	126	1075	645
8:30-9:30	48	35	475	882	136	121	996	617
8:45-9:45	49	40	470	830	115	121	952	595
TOTAL	142	71	1301	2860	424	458	3268	1746

LOCATION NUMBER = B-#10
STREET NAME APPROACH #1= BACON RD
STREET NAME APPROACH #2= GREAT RD
STREET NAME APPROACH #3= HILLSIDE
STREET NAME APPROACH #4= GREAT RD

COMMUNITY = BEDFORD
DATE COUNTED = 6/14/90
E' = = 7/3/90
E' = =
E' = =
E' = =

CUMULATIVE VOLUME FIGURES

PERIOD	R1	S1	L1	TRR1	TRS1	TRL1	R2	S2	L2	TRR2	TRS2	TRL2
11:00-11:15	7	0	0	0	0	0	1	131	1	0	6	0
11:15-11:30	24	2	1	0	0	0	3	276	1	0	14	0
11:30-11:45	60	6	1	0	0	0	3	430	4	0	25	1
11:45-12:00	74	6	1	0	0	0	6	590	7	0	34	1
12:00-12:15	96	9	5	1	0	0	7	757	10	0	37	1
12:15-12:30	111	13	5	1	0	0	7	938	14	0	44	1
12:30-12:45	128	14	9	2	0	0	8	1092	19	0	51	2
12:45-1:00	138	14	10	2	0	0	9	1266	25	0	55	2
1:00-1:15	148	14	14	4	2	1	12	1420	29	0	64	2
1:15-1:30	160	14	14	4	2	1	13	1604	32	1	71	2
N/A												
N/A												
N/A												

CUMULATIVE VOLUME FIGURES

PERIOD	R3	S3	L3	TRR3	TRS3	TRL3	R4	S4	L4	TRR4	TRS4	TRL4
11:00-11:15	4	0	22	1	0	0	28	111	12	2	9	0
11:15-11:30	7	1	45	1	0	1	64	211	30	2	21	1
11:30-11:45	8	8	71	2	0	2	100	345	52	6	29	3
11:45-12:00	11	9	90	2	1	3	130	486	79	6	42	3
12:00-12:15	14	10	121	2	2	5	164	630	110	7	53	3
12:15-12:30	15	12	154	2	2	5	195	758	139	9	62	3
12:30-12:45	16	12	183	2	2	6	245	912	162	11	74	4
12:45-1:00	18	15	210	2	2	7	288	1065	187	12	89	4
1:00-1:15	24	18	226	2	2	8	322	1219	204	12	98	5
1:15-1:30	27	20	250	2	2	9	356	1372	216	15	110	6
N/A												
N/A												
N/A												

ACTUAL TIME PERIOD VOLUME FIGURE

PERIOD	R1	S1	L1	TRR1	TRS1	TRL1	R2	S2	L2	TRR2	TRS2	TRL2
11:00-11:15	7	0	0	0	0	0	1	131	1	0	6	0
11:15-11:30	17	2	1	0	0	0	2	145	0	0	8	0
11:30-11:45	36	4	0	0	0	0	0	154	3	0	11	1
11:45-12:00	14	0	0	0	0	0	3	160	3	0	9	0
12:00-12:15	22	3	4	1	0	0	1	167	3	0	3	0
12:15-12:30	15	4	0	0	0	0	0	181	4	0	7	0
12:30-12:45	17	1	4	1	0	0	1	154	5	0	7	1
12:45-1:00	10	0	1	0	0	0	1	174	6	0	4	0
1:00-1:15	10	0	4	2	2	1	3	154	4	0	9	0
1:15-1:30	12	0	0	0	0	0	1	184	3	1	7	0
N/A												
N/A												
N/A												
TOTAL	160	14	14	4	2	1	13	1604	32	1	71	2

LOCATION NUMBER = B-#10
STREET NAME APPROACH #1= BACON RD
STREET NAME APPROACH #2= GREAT RD
STREET NAME APPROACH #3= HILLSIDE
STREET NAME APPROACH #4= GREAT RD

COMMUNITY = BEDFORO
DATE COUNTED = 6/14/90
E' = = 7/3/90
E' = =
E' = =
E' = =

ACTUAL TIME PERIOD VOLUME FIGURE

PERIOD	R3	S3	L3	TRR3	TRS3	TRL3	R4	S4	L4	TRR4	TRS4	TRL4
11:00-11:15	4	0	22	1	0	0	28	111	12	2	9	0
11:15-11:30	3	1	23	0	0	1	36	100	18	0	12	1
11:30-11:45	1	7	26	1	0	1	36	134	22	4	8	2
11:45-12:00	3	1	19	0	1	1	30	141	27	0	13	0
12:00-12:15	3	1	31	0	1	2	34	144	31	1	11	0
12:15-12:30	1	2	33	0	0	0	31	128	29	2	9	0
12:30-12:45	1	0	29	0	0	1	50	154	23	2	12	1
12:45-1:00	2	3	27	0	0	1	43	153	25	1	13	0
1:00-1:15	6	3	16	0	0	1	34	154	17	0	11	1
1:15-1:30	3	2	24	0	0	1	34	153	12	3	12	1
N/A												
N/A												
N/A												
TOTAL	27	20	250	2	2	9	356	1372	216	15	110	6

ACTUAL TIME PERIOD VOLUME FIGURE

PERIOD	ENTER 1	EXIT	ENTER 2	EXIT	ENTER 3	EXIT	ENTER 4	EXIT
11:00-11:15	7	13	139	125	27	31	162	166
11:15-11:30	20	22	155	116	28	38	167	194
11:30-11:45	40	31	169	144	36	48	206	228
11:45-12:00	14	32	175	157	25	33	211	203
12:00-12:15	30	34	174	162	38	41	221	226
12:15-12:30	19	31	192	138	36	41	199	236
12:30-12:45	23	25	168	171	31	59	242	209
12:45-1:00	11	29	185	169	33	50	235	216
1:00-1:15	19	24	170	176	26	40	217	192
1:15-1:30	12	17	196	168	30	40	215	228
N/A	0	0	0	0	0	0	0	0
N/A	0	0	0	0	0	0	0	0
N/A	0	0	0	0	0	0	0	0
TOTAL	195	258	1723	1526	310	421	2075	2098

	APPROACH 1				APPROACH 2			
PERIOD	VOL	PHF	VOL T	% TKS	VOL	PHF	VOL T	% TKS
11:00-12:00	81	0.51	0	0.00	638	0.91	35	5.49
11:15-12:15	104	0.65	1	0.96	673	0.96	32	4.75
11:30-12:30	103	0.64	1	0.97	710	0.92	31	4.37
11:45-12:45	86	0.72	2	2.33	709	0.92	27	3.81
12:00-1:00	83	0.69	2	2.41	719	0.94	22	3.06
12:15-1:15	72	0.78	6	8.33	715	0.93	28	3.92
12:30-1:30	65	0.71	6	9.23	719	0.92	29	4.03
N/A								
N/A								
N/A								

LOCATION NUMBER = B-#10
STREET NAME APPROACH #1= BACON RO
STREET NAME APPROACH #2= GREAT RO
STREET NAME APPROACH #3= HILLSIOE AV
STREET NAME APPROACH #4= GREAT RO

COMMUNITY = BEOFORO
OATE COUNTEO = 6/14/90
E' = = 7/3/90
E' = =
E' = =
E' = =

CUMULATIVE VOLUME FIGURES

PERIOO	R1	S1	L1	TRR1	TRS1	TRL1	R2	S2	L2	TRR2	TRS2	TRL2
2:30-2:45	0	0	0	0	0	0	0	0	0	0	0	0
2:45-3:00	0	0	0	0	0	0	0	0	0	0	0	0
3:00-3:15	8	0	3	0	0	0	8	155	2	0	3	0
3:15-3:30	12	1	8	2	0	0	10	291	7	0	19	0
3:30-3:45	26	4	9	3	0	0	14	428	11	0	21	0
3:45-4:00	30	8	10	3	0	1	18	589	16	0	23	0
4:00-4:15	42	14	11	3	0	1	22	733	22	0	29	0
4:15-4:30	50	22	13	3	0	1	23	873	24	0	35	0
4:30-4:45	56	63	26	3	2	2	25	996	26	1	35	0
4:45-5:00	85	90	43	4	3	2	28	1094	30	1	38	0
5:00-5:15	100	125	50	4	4	2	33	1247	35	1	41	0
5:15-5:30	116	146	63	4	4	2	35	1411	44	2	42	0
5:30-5:45	124	154	66	4	4	2	44	1568	48	2	44	0
5:45-6:00	130	160	67	4	5	2	48	1721	55	2	45	0
6:00-6:15	139	162	67	4	5	2	52	1880	62	2	47	0
6:15-6:30	151	164	67	4	5	2	53	2235	70	2	47	0

CUMULATIVE VOLUME FIGURES

PERIOD	R3	S3	L3	TRR3	TRS3	TRL3	R4	S4	L4	TRR4	TRS4	TRL4
2:30-2:45	0	0	0	0	0	0	0	0	0	0	0	0
2:45-3:00	0	0	0	0	0	0	0	0	0	0	0	0
3:00-3:15	0	2	22	0	0	0	26	88	22	1	8	0
3:15-3:30	3	3	41	0	0	0	60	188	50	2	18	0
3:30-3:45	5	7	49	0	1	0	110	328	78	2	24	0
3:45-4:00	7	8	60	0	1	0	141	500	90	6	35	1
4:00-4:15	13	12	88	0	1	0	205	710	104	7	49	1
4:15-4:30	16	13	103	0	1	1	253	900	119	8	64	1
4:30-4:45	18	14	127	0	2	1	322	1100	135	9	77	2
4:45-5:00	18	18	139	0	2	1	367	1298	139	9	82	2
5:00-5:15	18	19	151	0	3	1	435	1509	150	9	88	2
5:15-5:30	20	19	169	0	4	1	496	1695	162	9	89	2
5:30-5:45	21	21	186	0	4	1	547	1882	168	12	95	2
5:45-6:00	24	21	205	0	5	2	596	2095	177	13	100	2
6:00-6:15	27	22	229	0	6	2	652	2286	194	13	107	2
6:15-6:30	27	25	245	0	6	2	718	2492	209	16	112	2

ACTUAL TIME PERIOD VOLUME FIGURE

PERIOD	R1	S1	L1	TRR1	TRS1	TRL1	R2	S2	L2	TRR2	TRS2	TRL2
2:30-2:45	0	0	0	0	0	0	0	0	0	0	0	0
2:45-3:00	0	0	0	0	0	0	0	0	0	0	0	0
3:00-3:15	8	0	3	0	0	0	8	155	2	0	3	0
3:15-3:30	4	1	5	2	0	0	2	136	5	0	16	0
3:30-3:45	14	3	1	1	0	0	4	137	4	0	2	0
3:45-4:00	4	4	1	0	0	1	4	161	5	0	2	0
4:00-4:15	12	6	1	0	0	0	4	144	6	0	6	0
4:15-4:30	8	8	2	0	0	0	1	140	2	0	6	0
4:30-4:45	6	41	13	0	2	1	2	123	2	1	0	0
4:45-5:00	29	27	17	1	1	0	3	98	4	0	3	0
5:00-5:15	15	35	7	0	1	0	5	153	5	0	3	0
5:15-5:30	16	21	13	0	0	0	2	164	9	1	1	0
5:30-5:45	8	8	3	0	0	0	9	157	4	0	2	0
5:45-6:00	6	6	1	0	1	0	4	153	7	0	1	0
6:00-6:15	9	2	0	0	0	0	4	159	7	0	2	0
6:15-6:30	12	2	0	0	0	0	1	355	8	0	0	0
TOTAL	151	164	67	4	5	2	53	2235	70	2	47	0

LOCATION NUMBER = B-#10
STREET NAME APPROACH #1= BACON RD
STREET NAME APPROACH #2= GREAT RD
STREET NAME APPROACH #3= HILLSIDE
STREET NAME APPROACH #4= GREAT RD

COMMUNITY = BEDFORD
DATE COUNTED = 6/14/90
E' = = 7/3/90
E' = =
E' = =
E' = =

	APPROACH 3				APPROACH 4				INTERSECTION APP. PEAK HR. VOLUME	
PERIOD	VOL	PHF	VOL T	% TKS	VOL	PHF	VOL T	% TKS	/PEAK HOUR	1837
11:00-12:00	116	0.81	6	5.17	746	0.88	51	6.84	1581	0.88
11:15-12:15	127	0.84	8	6.30	805	0.91	52	6.46	1709	0.92
11:30-12:30	135	0.89	7	5.19	837	0.95	50	5.97	1785	0.96
11:45-12:45	130	0.86	6	4.62	873	0.90	51	5.84	1798	0.97
12:00-1:00	138	0.91	5	3.62	897	0.93	52	5.80	1837	0.99
12:15-1:15	126	0.88	3	2.38	893	0.92	52	5.82	1806	0.97
12:30-1:30	120	0.91	4	3.33	909	0.94	57	6.27	1813	0.98
N/A									0	0.00
N/A									0	0.00
N/A									0	0.00

	APPRO. 1			APPRO. 2			APPRO 3.			APPRO. 4		
PERIOD	R	S	L	R	S	L	R	S	L	R	S	L
11:00-12:00	74	6	1	6	624	8	13	10	93	136	528	82
11:15-12:15	90	9	5	6	657	10	11	12	104	141	563	101
11:30-12:30	88	11	4	4	692	14	9	13	113	138	588	111
11:45-12:45	70	8	8	5	688	16	8	6	116	150	612	111
12:00-1:00	66	8	9	3	697	19	7	7	124	164	624	109
12:15-1:15	55	7	10	5	690	20	10	8	108	163	634	96
12:30-1:30	52	3	10	7	693	19	12	8	100	167	662	80
N/A												
N/A												
N/A												
TOTAL	164	16	15	14	1675	34	29	22	259	371	1482	222

	EXIT	VOL.ENTER APP 1	EXIT	VOL.ENTER APP 2	EXIT	VOL.ENTER APP 3	EXIT	VOL.ENTER APP 4
PERIOD								
11:00-12:00	98	81	542	638	150	116	791	746
11:15-12:15	119	104	579	673	160	127	851	805
11:30-12:30	128	103	601	710	163	135	893	837
11:45-12:45	122	86	628	709	174	130	874	873
12:00-1:00	119	83	640	719	191	138	887	897
12:15-1:15	109	72	654	715	190	126	853	893
12:30-1:30	95	65	684	719	189	120	845	909
TOTAL	258	195	1526	1723	421	310	2098	2075

LOCATION NUMBER = B-#10
STREET NAME APPROACH #1= BACON RD
STREET NAME APPROACH #2= GREAT RO
STREET NAME APPROACH #3= HILLSIOE AV
STREET NAME APPROACH #4= GREAT RD

COMMUNITY = BEOFORD
DATE COUNTED = 6/14/90
E' = = 7/3/90
E' = =
E' = =
E' = =

ACTUAL TIME PERIOD VOLUME FIGURE

PERIOD	R3	S3	L3	TRR3	TRS3	TRL3	R4	S4	L4	TRR4	TRS4	TRL4
2:30-2:45	0	0	0	0	0	0	0	0	0	0	0	0
2:45-3:00	0	0	0	0	0	0	0	0	0	0	0	0
3:00-3:15	0	2	22	0	0	0	26	88	22	1	8	0
3:15-3:30	3	1	19	0	0	0	34	100	28	1	10	0
3:30-3:45	2	4	8	0	1	0	50	140	28	0	6	0
3:45-4:00	2	1	11	0	0	0	31	172	12	4	11	1
4:00-4:15	6	4	28	0	0	0	64	210	14	1	14	0
4:15-4:30	3	1	15	0	0	1	48	190	15	1	15	0
4:30-4:45	2	1	24	0	1	0	69	200	16	1	13	1
4:45-5:00	0	4	12	0	0	0	45	198	4	0	5	0
5:00-5:15	0	1	12	0	1	0	68	211	11	0	6	0
5:15-5:30	2	0	18	0	1	0	61	186	12	0	1	0
5:30-5:45	1	2	17	0	0	0	51	187	6	3	6	0
5:45-6:00	3	0	19	0	1	1	49	213	9	1	5	0
6:00-6:15	3	1	24	0	1	0	56	191	17	0	7	0
6:15-6:30	0	3	16	0	0	0	66	206	15	3	5	0
TOTAL	27	25	245	0	6	2	718	2492	209	16	112	2

ACTUAL TIME PERIOD VOLUME FIGURE

PERIOD	ENTER 1	EXIT	ENTER 2	EXIT	ENTER 3	EXIT	ENTER 4	EXIT
2:30-2:45	0	0	0	0	0	0	0	0
2:45-3:00	0	0	0	0	0	0	0	0
3:00-3:15	11	32	168	99	24	29	145	188
3:15-3:30	12	31	159	118	23	41	173	177
3:30-3:45	19	37	147	149	15	57	224	162
3:45-4:00	10	18	172	187	14	44	231	178
4:00-4:15	19	22	160	231	38	77	303	190
4:15-4:30	18	17	149	210	20	59	269	170
4:30-4:45	63	22	128	229	28	115	300	153
4:45-5:00	75	11	108	220	16	77	252	143
5:00-5:15	58	18	166	224	14	109	296	183
5:15-5:30	50	16	177	202	21	91	260	199
5:30-5:45	19	17	172	197	20	66	253	184
5:45-6:00	14	14	165	222	24	64	277	180
6:00-6:15	11	23	172	201	29	65	271	194
6:15-6:30	14	19	364	211	19	79	295	383
TOTAL	393	297	2407	2700	305	973	3549	2684

	APPROACH 1				APPROACH 2			
PERIOD	VOL	PHF	VOL T	% TKS	VOL	PHF	VOL T	% TKS
2:30-3:30	23	0.48	2	8.70	327	0.49	19	5.81
2:45-3:45	42	0.55	3	7.14	474	0.71	21	4.43
3:00-4:00	52	0.68	4	7.69	646	0.94	23	3.56
3:15-4:15	60	0.79	4	6.67	638	0.93	26	4.08
3:30-4:30	66	0.87	2	3.03	628	0.91	16	2.55
3:45-4:45	110	0.44	4	3.64	609	0.89	15	2.46
4:00-5:00	175	0.58	5	2.86	545	0.85	16	2.94
4:15-5:15	214	0.71	6	2.80	551	0.83	13	2.36
4:30-5:30	246	0.82	6	2.44	579	0.82	9	1.55
4:45-5:45	202	0.67	3	1.49	623	0.88	10	1.61
5:00-6:00	141	0.61	2	1.42	680	0.96	8	1.18
5:15-6:15	94	0.47	1	1.06	686	0.97	7	1.02
5:30-6:30	58	0.76	1	1.72	873	0.60	5	0.57

LOCATION NUMBER = B-#10
STREET NAME APPROACH #1= BACON RD
STREET NAME APPROACH #2= GREAT RD
STREET NAME APPROACH #3= HILLSIDE AV
STREET NAME APPROACH #4= GREAT RD

COMMUNITY = BEDFORD
DATE COUNTED = 6/14/90
E' = = 7/3/90
E' = =
E' = =
E' = =

	APPROACH 3				APPROACH 4				INTERSECTION APP. PEAK HR. VOLUME	
PERIOD	VOL	PHF	VOL T	% TKS	VOL	PHF	VOL T	% TKS	/PEAK HOUR	2119
2:30-3:30	47	0.49	0	0.00	318	0.46	20	6.29	715	0.49
2:45-3:45	62	0.65	1	1.61	542	0.60	26	4.80	1120	0.69
3:00-4:00	76	0.79	1	1.32	773	0.84	42	5.43	1547	0.91
3:15-4:15	90	0.59	1	1.11	931	0.77	48	5.16	1719	0.83
3:30-4:30	87	0.57	2	2.30	1027	0.85	53	5.16	1808	0.87
3:45-4:45	100	0.66	2	2.00	1103	0.91	62	5.62	1922	0.92
4:00-5:00	102	0.67	2	1.96	1124	0.93	51	4.54	1946	0.94
4:15-5:15	78	0.70	3	3.85	1117	0.93	42	3.76	1960	0.92
4:30-5:30	79	0.71	3	3.80	1108	0.92	27	2.44	2012	0.94
4:45-5:45	71	0.85	2	2.82	1061	0.90	21	1.98	1957	0.92
5:00-6:00	79	0.82	4	5.06	1086	0.92	22	2.03	1986	0.93
5:15-6:15	94	0.81	4	4.26	1061	0.96	23	2.17	1935	0.95
5:30-6:30	92	0.79	3	3.26	1096	0.93	30	2.74	2119	0.77

	APPRO. 1			APPRO. 2			APPRO 3.			APPRO. 4		
PERIOD	R	S	L	R	S	L	R	S	L	R	S	L
2:30-3:30	14	1	8	10	310	7	3	3	41	62	206	50
2:45-3:45	29	4	9	14	449	11	5	8	49	112	352	78
3:00-4:00	33	8	11	18	612	16	7	9	60	147	535	91
3:15-4:15	37	14	9	14	604	20	13	11	66	185	663	83
3:30-4:30	39	21	6	13	598	17	13	11	63	199	758	70
3:45-4:45	30	61	19	12	582	15	13	8	79	219	825	59
4:00-5:00	56	85	34	11	520	14	11	11	80	229	845	50
4:15-5:15	59	115	40	12	526	13	5	9	64	232	838	47
4:30-5:30	67	128	51	14	545	20	4	9	66	244	820	44
4:45-5:45	69	93	40	20	581	22	3	9	59	228	800	33
5:00-6:00	45	72	24	21	634	25	6	6	67	233	815	38
5:15-6:15	39	38	17	20	639	27	9	6	79	221	796	44
5:30-6:30	35	19	4	18	829	26	7	8	77	229	820	47
TOTAL	155	169	69	55	2282	70	27	31	247	734	2604	211

	EXIT	VOL.ENTER APP 1	EXIT	VOL.ENTER APP 2	EXIT	VOL.ENTER APP 3	EXIT	VOL.ENTER APP 4
PERIOD								
2:30-3:30	63	23	217	327	70	47	365	318
2:45-3:45	100	42	366	474	127	62	527	542
3:00-4:00	118	52	553	646	171	76	705	773
3:15-4:15	108	60	685	638	219	90	707	931
3:30-4:30	94	66	777	628	237	87	700	1027
3:45-4:45	79	110	857	609	295	100	691	1103
4:00-5:00	72	175	890	545	328	102	656	1124
4:15-5:15	68	214	883	551	360	78	649	1117
4:30-5:30	67	246	875	579	392	79	678	1108
4:45-5:45	62	202	843	623	343	71	709	1061
5:00-6:00	65	141	845	680	330	79	746	1086
5:15-6:15	70	94	822	686	286	94	757	1061
5:30-6:30	73	58	831	873	274	92	941	1096
TOTAL	297	393	2700	2407	973	305	2684	3549

LOCATION NUMBER = 7
STREET NAME APPROACH #1= SHAWSH
STREET NAME APPROACH #2= GREAT
STREET NAME APPROACH #3= PINE S
STREET NAME APPROACH #4= GREAT

COMMUNITY = BEDFOR
DATE COUNTED = 5/31/90
DATE ADJUSTED =
DATE ADJUSTED =
DATE ADJUSTED =
DATE ADJUSTED =

CUMULATIVE VOLUME FIGURES

PERIOD	R1	S1	L1	TRR1	TRS1	TRL1	R2	S2	L2	TRR2	TRS2	TRL2
6:30-6:45	0	0	0	0	0	0	0	0	0	0	0	0
6:45-7:00	6	2	119	1	0	0	30	138	0	1	5	0
7:00-7:15	10	3	238	1	0	4	49	270	1	1	14	0
7:15-7:30	13	4	339	2	0	10	81	427	2	1	21	0
7:30-7:45	14	4	466	2	0	11	120	607	2	1	32	0
7:45-8:00	17	5	587	2	0	13	176	782	2	1	39	0
8:00-8:15	23	7	727	2	0	17	209	953	3	1	44	0
8:15-8:30	28	7	848	2	0	21	240	1110	5	4	55	1
8:30-8:45	30	8	984	2	0	23	275	1271	5	5	56	1
8:45-9:00	30	8	1110	2	0	25	290	1387	5	7	95	1
9:00-9:15	31	10	1223	2	0	31	318	1517	5	8	100	1
9:15-9:30	35	12	1332	2	0	34	336	1663	5	9	109	1
9:30-9:45	43	15	1454	2	0	36	356	1798	7	9	128	2

CUMULATIVE VOLUME FIGURES

PERIOD	R3	S3	L3	TRR3	TRS3	TRL3	R4	S4	L4	TRR4	TRS4	TRL4
6:30-6:45	0	0	0	0	0	0	0	0	0	0	0	0
6:45-7:00	4	0	0	2	2	1	3	150	1	2	14	1
7:00-7:15	8	4	1	2	3	1	11	281	4	2	30	1
7:15-7:30	10	5	3	2	3	1	13	436	6	3	36	1
7:30-7:45	14	5	7	2	4	1	16	630	8	3	46	1
7:45-8:00	20	6	12	2	4	2	19	825	12	3	58	1
8:00-8:15	24	9	14	2	4	2	20	1047	13	3	71	1
8:15-8:30	28	9	20	2	4	3	23	1249	20	4	81	1
8:30-8:45	33	11	23	2	4	4	25	1449	24	5	91	1
8:45-9:00	35	13	27	3	4	5	30	1631	28	5	96	2
9:00-9:15	37	15	33	3	4	5	34	1823	34	7	112	3
9:15-9:30	41	15	37	4	4	6	45	1990	38	8	127	3
9:30-9:45	45	18	40	6	5	7	52	2127	39	10	141	3

ACTUAL TIME PERIOD VOLUME FIGURE

PERIOD	R1	S1	L1	TRR1	TRS1	TRL1	R2	S2	L2	TRR2	TRS2	TRL2
6:30-6:45	0	0	0	0	0	0	0	0	0	0	0	0
6:45-7:00	6	2	119	1	0	0	30	138	0	1	5	0
7:00-7:15	4	1	119	0	0	4	19	132	1	0	9	0
7:15-7:30	3	1	101	1	0	6	32	157	1	0	7	0
7:30-7:45	1	0	129	0	0	1	39	180	0	0	11	0
7:45-8:00	3	1	119	0	0	2	56	175	0	0	6	0
8:00-8:15	6	2	140	0	0	4	33	171	1	0	6	0
8:15-8:30	5	0	121	0	0	4	31	157	2	3	11	1
8:30-8:45	2	1	136	0	0	2	35	161	0	1	11	0
8:45-9:00	0	0	126	0	0	2	15	116	0	2	29	0
9:00-9:15	1	2	113	0	0	6	28	130	0	1	5	0
9:15-9:30	4	2	109	0	0	3	18	146	0	1	9	0
9:30-9:45	8	3	122	0	0	2	20	135	2	0	19	1
TOTAL	43	15	1454	2	0	36	356	1798	7	9	128	2

LOCATION NUMBER = 7

STREET NAME APPROACH #1= SHARSH
STREET NAME APPROACH #2= GREAT
STREET NAME APPROACH #3= PINE S
STREET NAME APPROACH #4= GREAT

COMMUNITY = BEDFOR
DATE COUNTED = 5/31/90
DATE ADJUSTED =
DATE ADJUSTED =
DATE ADJUSTED =
DATE ADJUSTED =

ACTUAL TIME PERIOD VOLUME FIGURE

PERIOD	R3	S3	L3	TRR3	TRS3	TRL3	R4	S4	L4	TRR4	TRS4	TRL4
6:30-6:45	0	0	0	0	0	0	0	0	0	0	0	0
6:45-7:00	4	0	0	2	2	1	3	150	1	2	14	1
7:00-7:15	4	4	1	0	1	0	8	131	3	0	16	0
7:15-7:30	2	1	2	0	0	0	2	155	2	1	6	0
7:30-7:45	4	0	4	0	1	0	3	194	2	0	10	0
7:45-8:00	6	1	5	0	0	1	3	✓195	4	0	12	0
8:00-8:15	4	3	2	0	0	0	1	✓222	1	0	13	0
8:15-8:30	4	0	6	0	0	1	3	✓202	7	1	10	0
8:30-8:45	5	2	3	0	0	1	2	✓200	4	1	10	0
8:45-9:00	2	2	4	1	0	1	5	182	4	0	5	1
9:00-9:15	2	2	6	0	0	0	4	192	6	2	16	1
9:15-9:30	4	1	4	1	0	1	11	167	4	1	15	0
9:30-9:45	4	2	3	2	1	1	7	137	1	2	14	0
TOTAL	45	18	40	6	5	7	52	2127	39	10	141	3

ACTUAL TIME PERIOD VOLUME FIGURE

PERIOD	ENTER	EXIT	ENTER	EXIT	ENTER	EXIT	ENTER	EXIT
6:30-6:45	0	0	0	0	0	0	0	0
6:45-7:00	128	35	174	289	9	7	171	151
7:00-7:15	128	27	161	274	10	10	158	146
7:15-7:30	112	35	197	270	5	5	166	170
7:30-7:45	131	42	230	333	9	3	209	196
7:45-8:00	125	61	237	334	13	4	214	190
8:00-8:15	152	37	211	383	9	4	237	185
8:15-8:30	130	41	205	341	11	7	223	180
8:30-8:45	141	42	208	353	11	4	217	178
8:45-9:00	129	24	162	318	10	5	197	150
9:00-9:15	122	38	164	329	10	8	221	142
9:15-9:30	118	24	174	299	11	14	198	164
9:30-9:45	135	24	177	241	13	15	161	166
TOTAL	1550	430	2300	3809	121	86	2372	2018

LOCATION NUMBER = 007
STREET NAME APPROACH #1= SHARON
STREET NAME APPROACH #2= GREAT
STREET NAME APPROACH #3= PINE S
STREET NAME APPROACH #4= GREAT

COMMUNITY = BEDFOR
DATE COUNTED = 5/31/90
DATE ADJUSTED =
DATE ADJUSTED =
DATE ADJUSTED =
DATE ADJUSTED =

CUMULATIVE VOLUME FIGURES

PERIOD	R1	S1	L1	TRR1	TRS1	TRL1	R2	S2	L2	TRR2	TRS2	TRL2
11:00-11:15	6	3	65	0	1	7	29	149	1	0	7	0
11:15-11:30	9	6	144	0	2	11	78	329	3	0	18	1
11:30-11:45	32	9	203	0	4	24	120	542	6	4	28	1
11:45-12:00	40	15	271	0	4	24	162	720	11	5	32	2
12:00-12:15	54	25	363	0	4	24	199	943	16	6	41	2
12:15-12:30	76	32	455	0	4	24	242	1137	17	6	43	2
12:30-12:45	97	36	573	1	4	24	280	1331	18	7	53	3
12:45-1:00	106	39	652	1	4	31	310	1495	23	10	60	3
1:00-1:15	117	42	744	2	4	31	340	1664	26	10	72	3
1:15-1:30	133	47	819	2	4	33	369	1830	27	11	82	4
N/A												
N/A												
N/A												

CUMULATIVE VOLUME FIGURES

PERIOD	R3	S3	L3	TRR3	TRS3	TRL3	R4	S4	L4	TRR4	TRS4	TRL4
11:00-11:15	6	1	6	1	0	1	2	167	3	0	5	0
11:15-11:30	13	3	10	1	0	1	8	303	6	0	14	0
11:30-11:45	17	4	21	1	0	2	19	454	11	1	23	0
11:45-12:00	28	4	30	2	1	4	24	617	19	1	37	0
12:00-12:15	39	9	44	2	1	4	27	790	25	1	48	0
12:15-12:30	48	12	51	3	1	7	30	990	29	1	62	0
12:30-12:45	55	17	70	4	1	8	30	1181	31	1	74	0
12:45-1:00	75	26	91	4	1	8	31	1359	36	1	81	1
1:00-1:15	94	33	101	5	1	8	38	1516	39	1	88	1
1:15-1:30	107	36	111	5	1	8	41	1728	43	1	92	1
N/A												
N/A												
N/A												

ACTUAL TIME PERIOD VOLUME FIGURES

PERIOD	R1	S1	L1	TRR1	TRS1	TRL1	R2	S2	L2	TRR2	TRS2	TRL2
11:00-11:15	6	3	65	0	1	7	29	149	1	0	7	0
11:15-11:30	3	3	79	0	1	4	49	180	2	0	11	1
11:30-11:45	23	3	59	0	2	13	42	213	3	4	10	0
11:45-12:00	8	6	68	0	0	0	42	178	5	1	4	1
12:00-12:15	16	10	92	0	0	0	37	223	5	1	9	0
12:15-12:30	20	7	92	0	0	0	43	194	1	0	2	0
12:30-12:45	21	4	118	1	0	0	38	194	1	1	10	1
12:45-1:00	9	3	79	0	0	7	30	164	5	3	7	0
1:00-1:15	11	3	92	1	0	0	30	169	3	0	12	0
1:15-1:30	15	5	75	0	0	2	29	166	1	1	10	1
N/A												
N/A												
N/A												
TOTAL	133	47	819	2	4	33	369	1830	27	11	82	4

LOCATION NUMBER = 807
STREET NAME APPROACH #1= SHANSH
STREET NAME APPROACH #2= GREAT
STREET NAME APPROACH #3= PINE S
STREET NAME APPROACH #4= GREAT

COMMUNITY = BEDFOR
DATE COUNTED = 5/31/90
DATE ADJUSTED =
DATE ADJUSTED =
DATE ADJUSTED =
DATE ADJUSTED =

ACTUAL TIME PERIOD VOLUME FIGURE

PERIOD	R3	S3	L3	TRR3	TRS3	TRL3	R4	S4	L4	TRR4	TRS4	TRL4
11:00-11:15	6	1	6	1	0	1	2	167	3	0	5	0
11:15-11:30	7	2	4	0	0	0	6	136	3	0	9	0
11:30-11:45	4	1	11	0	0	1	11	151	5	1	9	0
11:45-12:00	11	0	9	1	1	2	5	163	8	0	14	0
12:00-12:15	11	5	14	0	0	0	3	173	6	0	11	0
12:15-12:30	9	3	7	1	0	3	3	200	4	0	14	0
12:30-12:45	7	5	19	1	0	1	0	191	2	0	12	0
12:45-1:00	20	9	21	0	0	0	1	178	5	0	7	1
1:00-1:15	19	7	10	1	0	0	7	157	3	0	7	0
1:15-1:30	13	3	10	0	0	0	3	212	4	0	4	0
N/A												
N/A												
N/A												
TOTAL	107	36	111	5	1	8	41	1728	43	1	92	1

ACTUAL TIME PERIOD VOLUME FIGURE

PERIOD	ENTER	EXIT	ENTER	EXIT	ENTER	EXIT	ENTER	EXIT
11:00-11:15	82	33	186	251	15	7	177	169
11:15-11:30	90	54	243	235	13	13	154	198
11:30-11:45	100	52	272	236	17	20	177	258
11:45-12:00	82	52	231	257	24	17	190	201
12:00-12:15	118	49	275	287	30	18	193	262
12:15-12:30	119	50	240	316	23	11	221	226
12:30-12:45	144	46	245	329	33	6	205	246
12:45-1:00	98	48	209	291	50	9	192	201
1:00-1:15	107	40	214	276	37	13	174	203
1:15-1:30	98	37	208	306	26	10	223	202
N/A	0	0	0	0	0	0	0	0
N/A	0	0	0	0	0	0	0	0
N/A	0	0	0	0	0	0	0	0
TOTAL	1038	461	2323	2784	269	124	1906	2166

LOCATION NUMBER = R07

STREET NAME APPROACH #1= SHAWSH
STREET NAME APPROACH #2= GREAT
STREET NAME APPROACH #3= PINE S
STREET NAME APPROACH #4= GREAT

COMMUNITY = BEDFOR
DATE COUNTED = 5/31/90
DATE ADJUSTED =
DATE ADJUSTED =
DATE ADJUSTED =
DATE ADJUSTED =

CUMULATIVE VOLUME FIGURES

PERIOD	R1	S1	L1	TRR1	TRS1	TRL1	R2	S2	L2	TRR2	TRS2	TRL2
2:30-2:45	0	0	0	0	0	0	0	0	0	0	0	0
2:45-3:00	0	0	0	0	0	0	0	0	0	0	0	0
3:00-3:15	13	3	85	0	0	3	65	165	2	4	5	0
3:15-3:30	24	3	181	0	0	3	93	336	6	7	13	1
3:30-3:45	30	3	264	2	0	5	166	508	11	19	33	2
3:45-4:00	36	5	324	2	0	6	237	718	11	21	40	2
4:00-4:15	43	9	402	2	0	6	343	916	11	25	47	2
4:15-4:30	47	14	485	2	0	9	414	1133	11	28	55	2
4:30-4:45	59	18	590	2	0	11	522	1336	18	32	63	2
4:45-5:00	65	23	689	2	0	16	637	1554	22	36	70	2
5:00-5:15	73	25	813	2	1	18	732	1682	22	38	71	2
5:15-5:30	80	27	960	2	1	19	864	1840	23	39	76	2
5:30-5:45	91	32	1058	2	1	19	955	2020	23	39	86	2
5:45-6:00	101	34	1160	2	1	20	1081	2230	23	40	91	2
6:00-6:15	108	41	1244	2	1	20	1145	2455	26	42	95	2
6:15-6:30	115	47	1317	2	3	23	1216	2685	26	42	99	2

CUMULATIVE VOLUME FIGURES

PERIOD	R3	S3	L3	TRR3	TRS3	TRL3	R4	S4	L4	TRR4	TRS4	TRL4
2:30-2:45	0	0	0	0	0	0	0	0	0	0	0	0
2:45-3:00	0	0	0	0	0	0	0	0	0	0	0	0
3:00-3:15	0	1	8	0	0	0	2	209	11	0	15	0
3:15-3:30	5	1	18	0	0	0	16	353	12	0	25	0
3:30-3:45	7	1	25	0	0	0	20	543	12	0	32	0
3:45-4:00	8	4	38	1	0	0	35	720	13	0	43	0
4:00-4:15	13	6	41	1	0	0	38	943	15	0	47	0
4:15-4:30	16	13	44	4	1	1	41	1137	18	0	51	0
4:30-4:45	16	17	52	5	1	1	42	1377	18	0	54	0
4:45-5:00	20	20	57	5	1	2	45	1587	19	1	63	0
5:00-5:15	23	22	64	5	2	2	47	1780	22	1	67	0
5:15-5:30	25	23	68	5	2	2	56	2004	31	1	69	0
5:30-5:45	28	29	70	5	2	2	63	2190	33	1	72	0
5:45-6:00	32	31	81	5	2	2	67	2396	37	1	78	0
6:00-6:15	37	35	89	5	2	2	72	2603	39	1	81	0
6:15-6:30	39	38	100	5	2	2	77	2777	40	1	84	0

ACTUAL TIME PERIOD VOLUME FIGURE

PERIOD	R1	S1	L1	TRR1	TRS1	TRL1	R2	S2	L2	TRR2	TRS2	TRL2
2:30-2:45	0	0	0	0	0	0	0	0	0	0	0	0
2:45-3:00	0	0	0	0	0	0	0	0	0	0	0	0
3:00-3:15	13	3	85	0	0	3	65	165	2	4	5	0
3:15-3:30	11	0	96	0	0	0	28	171	4	3	8	1
3:30-3:45	6	0	83	2	0	2	73	172	5	12	20	1
3:45-4:00	6	2	60	0	0	1	71	210	0	2	7	0
4:00-4:15	7	4	78	0	0	0	106	198	0	4	7	0
4:15-4:30	4	5	83	0	0	3	71	217	0	3	8	0
4:30-4:45	12	4	105	0	0	2	108	203	7	4	8	0
4:45-5:00	6	5	99	0	0	5	115	218	4	4	7	0
5:00-5:15	8	2	124	0	1	2	95	128	0	2	1	0
5:15-5:30	7	2	147	0	0	1	132	158	1	1	5	0
5:30-5:45	11	5	96	0	0	0	91	180	0	0	10	0
5:45-6:00	10	2	102	0	0	1	126	210	0	1	5	0
6:00-6:15	7	7	84	0	0	0	64	225	3	2	4	0

LOCATION NUMBER = 207

STREET NAME APPROACH #1=	SHAWSH	COMMUNITY =	BEDFOR
STREET NAME APPROACH #2=	GREAT	DATE COUNTED =	5/31/90
STREET NAME APPROACH #3=	PINE S	DATE ADJUSTED =	
STREET NAME APPROACH #4=	GREAT	DATE ADJUSTED =	
		DATE ADJUSTED =	

ACTUAL TIME PERIOD VOLUME FIGURE

PERIOD	R3	S3	L3	TRR3	TRS3	TRL3	R4	S4	L4	TRR4	TRS4	TRL4
2:30-2:45	0	0	0	0	0	0	0	0	0	0	0	0
2:45-3:00	0	0	0	0	0	0	0	0	0	0	0	0
3:00-3:15	0	1	8	0	0	0	2	209	11	0	15	0
3:15-3:30	5	0	10	0	0	0	14	144	1	0	10	0
3:30-3:45	2	0	7	0	0	0	4	190	0	0	7	0
3:45-4:00	1	3	13	1	0	0	15	177	1	0	11	0
4:00-4:15	5	2	3	0	0	0	3	223	2	0	4	0
4:15-4:30	3	7	3	3	1	1	3	194	3	0	4	0
4:30-4:45	0	4	8	1	0	0	1	240	0	0	3	0
4:45-5:00	4	3	5	0	0	1	3	210	1	1	9	0
5:00-5:15	3	2	7	0	1	0	2	193	3	0	4	0
5:15-5:30	2	1	4	0	0	0	9	224	9	0	2	0
5:30-5:45	3	5	2	0	0	0	7	186	2	0	3	0
5:45-6:00	4	2	11	0	0	0	4	206	4	0	6	0
6:00-6:15	5	4	8	0	0	0	5	207	2	0	3	0
6:15-6:30	2	3	11	0	0	0	5	174	1	0	3	0
TOTAL	39	38	100	5	2	2	77	2777	40	1	84	0

ACTUAL TIME PERIOD VOLUME FIGURE

PERIOD	ENTER	EXIT	ENTER	EXIT	ENTER	EXIT	ENTER	EXIT
2:30-2:45	0	0	0	0	0	0	0	0
2:45-3:00	0	0	0	0	0	0	0	0
3:00-3:15	104	81	241	312	9	7	237	191
3:15-3:30	107	32	215	255	15	19	169	200
3:30-3:45	93	35	283	284	9	10	201	207
3:45-4:00	69	77	290	251	18	17	204	236
4:00-4:15	89	114	315	310	10	7	232	215
4:15-4:30	95	85	299	290	18	8	204	233
4:30-4:45	123	116	330	351	13	12	244	231
4:45-5:00	115	123	348	327	13	13	224	237
5:00-5:15	137	103	226	325	13	5	202	144
5:15-5:30	157	143	297	376	7	12	244	174
5:30-5:45	114	99	281	290	11	12	198	203
5:45-6:00	115	133	342	319	17	6	220	236
6:00-6:15	98	72	298	299	17	15	217	244
6:15-6:30	92	75	305	255	16	13	183	253
TOTAL	1508	1338	4070	4245	186	156	2979	3004

Rte.128 North Suburban Planning Study

Site Code : 05319027
N-S Street: Hartwell Ave.
E-W Street: Bedford St. (Rtes 4/225)
Weather : Sunny

PAGE: 1
FILE: ro-27

Sum of the Primary and Secondary

DATE: 5/31/90

Time Begin	From ~~North~~ South RT	THRU	LT	From ~~East~~ West RT	THRU	LT	From ~~South~~ North RT	THRU	LT	From ~~West~~ East RT	THRU	LT	Vehicle Total
6:45	43	0	15	102	192	0	0	287	32	0	139	1	811
7:00 AM	45	0	25	112	198	0	1	357	32	0	144	0	914
7:15	67	0	43	118	239	0	0	382	35	0	200	0	1084
7:30	93	0	31	128	283	0	0	380	49	0	194	0	1158
7:45	104	0	39	112	290	0	1	397	59	0	215	0	1217
HR TOTAL	309	0	138	470	1010	0	2	1516	175	0	753	0	4373
8:00 AM	108	0	40	100	235	0	0	396	62	0	174	0	1115
8:15	111	0	38	115	275	0	1	292	57	0	189	0	1078
8:30	86	0	34	94	246	0	1	309	54	0	163	0	987
8:45	72	0	39	110	292	0	1	290	48	0	161	0	1013
HR TOTAL	377	0	151	419	1048	0	3	1287	221	0	687	0	4193
9:00 AM	58	0	34	94	281	0	1	229	41	0	144	0	882
9:15	85	0	34	76	264	0	0	228	34	0	133	0	854
9:30	80	0	38	66	224	0	0	200	25	0	155	0	788
DAY TOTAL	952	0	410	1227	3019	0	6	3747	528	0	2011	1	11901

PEAK PERIOD ANALYSIS FOR THE PERIOD: 6:45 AM - 09:45 AM

DIRECTION FROM	START PEAK HOUR	PEAK HR FACTOR	..... VOLUMES ..... Right	Thru	Left	Total	.... PERCENTS ... Right	Thru	Left
North	7:30 AM	0.95	416	0	148	564	74	0	26
East	7:30 AM	0.94	455	1083	0	1538	30	70	0
South	7:15 AM	0.96	1	1555	205	1761	0	88	12
West	7:15 AM	0.91	0	783	0	783	0	%100	0
Entire Intersection									
North	7:15 AM	0.89	372	0	153	525	71	0	29
East		0.92	458	1047	0	1505	30	70	0
South		0.96	1	1555	205	1761	0	88	12
West		0.91	0	783	0	783	0	%100	0

Rte.128 North Suburban Planning Study

Site Code : 05319027
N-S Street: Hartwell Ave.
E-W Street: Bedford St. (Rtes 4/225)
Weather : Sunny

PAGE: 1
FILE: ro-27

Sum of the Primary and Secondary

DATE: 5/31/90

Time Begin	From North RT	THRU	LT	From East RT	THRU	LT	From South RT	THRU	LT	From West RT	THRU	LT	Vehicle Total
11:00 AM	114	0	58	59	170	0	1	102	16	0	128	0	648
11:15	165	0	100	62	161	0	2	105	16	0	156	0	767
11:30	225	0	139	63	159	0	1	119	17	0	152	0	875
11:45	233	0	107	97	149	0	1	126	17	0	167	0	897
HR TOTAL	737	0	404	281	639	0	5	452	66	0	603	0	3187
12:00 PM	244	0	99	85	171	0	0	139	24	0	159	0	921
12:15	159	0	88	105	159	0	3	155	27	0	158	0	854
12:30	148	0	100	135	195	0	2	184	20	0	191	0	975
12:45	138	0	91	155	184	0	1	213	33	0	154	1	970
HR TOTAL	689	0	378	480	709	0	6	691	104	0	662	1	3720
1:00 PM	128	0	76	121	193	0	0	189	31	0	164	0	902
1:15	109	0	63	115	204	0	1	164	31	0	152	0	839
DAY TOTAL	1663	0	921	997	1745	0	12	1496	232	0	1581	1	8648

PEAK PERIOD ANALYSIS FOR THE PERIOD: 11:00 AM - 01:30 PM

DIRECTION FROM	START PEAK HOUR	PEAK HR FACTOR	VOLUMES Right	Thru	Left	Total	PERCENTS Right	Thru	Left
North	11:15 AM	0.90	867	0	445	1312	66	0	34
East	12:30 PM	0.96	526	776	0	1302	40	60	0
South	12:30 PM	0.88	4	750	115	869	0	86	13
West	11:45 AM	0.88	0	675	0	675	0	%100	0

Entire Intersection

North	12:00 PM	0.78	689	0	378	1067	65	0	35
East		0.88	480	709	0	1189	40	60	0
South		0.81	6	691	104	801	1	86	13
West		0.87	0	662	1	663	0	%100	0

Rte.128 North Suburban Planning Study

Site Code : 05319027
N-S Street: Hartwell Ave.
E-W Street: Bedford St. (Rtes 4/225)
Weather : Sunny

PAGE: 1
FILE: ro-27

Sum of the Primary and Secondary

DATE: 5/31/90

Time Begin	From ~~North~~ South RT	THRU	LT	From ~~East~~ West RT	THRU	LT	From ~~South~~ North RT	THRU	LT	From ~~West~~ East RT	THRU	LT	Vehicle Total
3:00 PM	209	0	102	45	193	0	1	93	24	0	165	0	832
3:15	221	0	59	38	188	0	0	105	20	0	177	1	809
3:30	329	0	98	58	232	0	3	107	17	0	206	0	1050
3:45	254	0	85	29	240	0	2	98	20	0	256	0	984
HR TOTAL	1013	0	344	170	853	0	6	403	81	0	804	1	3675
4:00 PM	328	0	124	38	221	0	1	117	25	0	219	0	1073
4:15	300	0	104	40	214	0	1	81	20	0	242	0	1002
4:30	377	0	149	41	218	0	2	116	22	0	206	1	1132
4:45	338	0	103	64	254	0	0	116	26	0	275	0	1176
HR TOTAL	1343	0	480	183	907	0	4	430	93	0	942	1	4383
5:00 PM	355	0	140	54	251	0	1	111	21	0	241	1	1175
5:15	297	0	86	65	278	0	2	123	22	0	263	0	1136
5:30	269	0	89	65	254	0	4	102	19	0	303	0	1105
5:45	227	0	78	86	217	0	2	81	19	0	273	0	983
HR TOTAL	1148	0	393	270	1000	0	9	417	81	0	1080	1	4399
6:00 PM	224	0	60	48	201	0	0	94	17	0	245	0	889
6:15	154	0	65	49	193	0	0	69	19	0	231	0	780
DAY TOTAL	3882	0	1342	720	3154	0	19	1413	291	0	3302	3	14126

PEAK PERIOD ANALYSIS FOR THE PERIOD: 03:00 PM - 06:30 PM

DIRECTION FROM	START PEAK HOUR	PEAK HR FACTOR	..... VOLUMES ..... Right	Thru	Left	Total	.... PERCENTS ... Right	Thru	Left
North	4:15 PM	0.89	1370	0	496	1866	73	0	27
East	4:45 PM	0.94	248	1037	0	1285	19	81	0
South	4:30 PM	0.96	5	466	91	562	1	83	16
West	5:15 PM	0.89	0	1084	0	1084	0	%100	0
Entire Intersection									
North	4:30 PM	0.88	1367	0	478	1845	74	0	26
East		0.89	224	1001	0	1225	18	82	0
South		0.96	5	466	91	562	1	83	16
West		0.90	0	985	2	987	0	%100	0

Rte.128 North Suburban Planning Study

Site Code : 061490B4 — PAGE: 1
N-S Street: South Rd./Hancock St. — FILE: b-4
E-W Street: Great Rd. (Rtes 4/225/62)
Weather : Sunny — Sum of the Priaary and Secondary — DATE: 6/14/90

South Rd — Great Rd. — Hancock St. — Great Rd.

Time Begin	From North RT	THRU	LT	From East RT	THRU	LT	From South RT	THRU	LT	From West RT	THRU	LT	Vehicle Total
6:45	4	2	17	78	173	11	6	24	19	0	56	2	391
7:00 AM	5	5	28	53	197	14	3	54	39	1	59	2	460
7:15	2	7	27	28	189	10	3	66	44	6	92	0	474
7:30	11	9	45	25	193	12	9	67	36	1	111	3	522
7:45	14	14	39	28	242	21	8	69	53	2	107	9	606
HR TOTAL	32	35	139	134	821	57	23	256	172	10	369	14	2062
8:00 AM	7	7	31	27	232	17	13	94	30	1	110	3	572
8:15	10	11	29	25	185	9	13	66	34	4	98	2	486
8:30	8	5	24	31	187	15	7	38	20	3	127	4	469
8:45	17	15	27	21	212	10	10	21	30	1	103	2	469
HR TOTAL	42	38	111	104	816	51	43	219	114	9	438	11	1996
9:00 AM	13	11	22	14	210	5	5	18	18	3	96	1	416
9:15	16	5	17	19	149	5	6	13	18	3	97	4	352
9:30	9	6	33	18	160	4	12	4	19	3	110	3	381
DAY TOTAL	116	97	339	367	2329	133	95	534	359	28	1166	35	5598

PEAK PERIOD ANALYSIS FOR THE PERIOD: 6:45 AM - 09:45 AM

DIRECTION FROM	START PEAK HOUR	PEAK HR FACTOR	..... VOLUMES ..... Right	Thru	Left	Total	.... PERCENTS ... Right	Thru	Left
North	7:30 AM	0.85	42	41	144	227	19	18	63
East	7:15 AM	0.88	108	856	60	1024	11	84	6
South	7:15 AM	0.90	33	296	163	492	7	60	33
West	7:45 AM	0.88	10	442	18	470	2	94	4

Entire Intersection

North	7:30 AM	0.85	42	41	144	227	19	18	63
East		0.87	105	852	59	1016	10	84	6
South		0.90	43	296	153	492	9	60	31
West		0.96	8	426	17	451	2	94	4

Rte.128 North Suburban Planning Study

Site Code : 06149084
N-S Street: South Rd./Hancock St.
E-W Street: Great Rd. (Rtes 4/225/62)
Weather : Sunny

PAGE: 1
FILE: b-4

Sum of the Primary and Secondary

DATE: 6/14/90

Time Begin	From North RT	THRU	LT	From East RT	THRU	LT	From South RT	THRU	LT	From West RT	THRU	LT	Vehicle Total
11:00 AM	19	5	19	3	85	2	3	2	9	3	115	4	269
11:15	14	13	53	10	116	9	11	5	12	6	123	3	375
11:30	22	14	43	9	124	7	12	2	17	0	128	8	386
11:45	22	20	46	9	110	10	16	8	13	3	148	3	408
HR TOTAL	77	52	161	31	435	28	42	17	51	12	514	18	1438
12:00 PM	26	33	67	11	122	5	22	13	23	2	137	3	464
12:15	23	20	45	9	141	2	10	7	29	2	132	6	426
12:30	14	13	30	11	130	11	11	14	14	4	143	13	408
12:45	19	22	32	14	136	8	13	19	22	2	143	9	439
HR TOTAL	82	88	174	45	529	26	56	53	88	10	555	31	1737
1:00 PM	15	11	20	7	126	4	7	12	14	1	148	5	370
1:15	8	9	25	5	162	6	10	16	19	3	152	5	420
DAY TOTAL	182	160	380	88	1252	64	115	98	172	26	1369	59	3965

PEAK PERIOD ANALYSIS FOR THE PERIOD: 11:00 AM - 01:30 PM

DIRECTION FROM	START PEAK HOUR	PEAK HR FACTOR	..... VOLUMES ..... Right	Thru	Left	Total	.... PERCENTS ... Right	Thru	Left
North	11:30 AM	0.76	93	87	201	381	24	23	53
East	12:30 PM	0.90	37	554	29	620	6	89	5
South	12:00 PM	0.85	56	53	88	197	28	27	45
West	12:30 PM	0.98	10	586	32	628	2	93	5
Entire Intersection									
North	12:00 PM	0.68	82	88	174	344	24	26	51
East		0.95	45	529	26	600	8	88	4
South		0.85	56	53	88	197	28	27	45
West		0.93	10	555	31	596	2	93	5

Rte.128 North Suburban Planning Study

Site Code : 061490B4 — PAGE: 1
N-S Street: South Rd./Hancock St. — FILE: b-4
E-W Street: Great Rd. (Rtes 4/225/62)
Weather : Sunny — Sum of the Primary and Secondary
DATE: 6/14/90

Time Begin	From North RT	THRU	LT	From East RT	THRU	LT	From South RT	THRU	LT	From West RT	THRU	LT	Vehicle Total
3:00 PM	13	11	60	8	98	5	9	7	18	3	160	3	395
3:15	11	6	59	13	100	5	24	11	9	8	136	10	392
3:30	8	27	102	7	130	6	16	6	20	5	213	2	542
3:45	14	30	104	6	109	6	27	13	20	2	188	4	523
HR TOTAL	46	74	325	34	437	22	76	37	67	18	697	19	1852
4:00 PM	13	44	107	8	112	5	41	7	15	3	227	1	583
4:15	10	42	107	10	120	7	63	6	19	3	216	1	604
4:30	5	50	113	10	88	4	52	14	19	2	203	4	564
4:45	9	76	108	11	66	3	81	9	16	0	200	1	580
HR TOTAL	37	212	435	39	386	19	237	36	69	8	846	7	2331
5:00 PM	7	51	101	6	134	5	66	2	14	4	217	1	608
5:15	11	60	94	9	140	3	69	10	11	1	190	4	602
5:30	10	39	98	4	147	4	83	10	15	2	200	1	613
5:45	19	39	90	18	136	9	46	29	13	4	189	2	594
HR TOTAL	47	189	383	37	557	21	264	51	53	11	796	8	2417
6:00 PM	16	31	89	7	152	9	35	11	15	1	209	2	577
6:15	15	13	77	13	132	4	29	10	12	0	202	2	509
DAY TOTAL	161	519	1309	130	1664	75	641	145	216	38	2750	38	7686

PEAK PERIOD ANALYSIS FOR THE PERIOD: 03:00 PM - 06:30 PM

DIRECTION FROM	START PEAK HOUR	PEAK HR FACTOR	..... VOLUMES ..... Right	Thru	Left	Total	.... PERCENTS ... Right	Thru	Left
North	4:30 PM	0.89	32	237	416	685	5	35	61
East	5:15 PM	0.95	38	575	25	638	6	90	4
South	4:45 PM	0.89	299	31	56	386	77	8	15
West	3:30 PM	0.94	13	844	8	865	2	98	1

Entire Intersection

North	5:00 PM	0.94	47	189	383	619	8	31	62
East		0.94	37	557	21	615	6	91	3
South		0.85	264	51	53	368	72	14	14
West		0.92	11	796	8	815	1	98	1

LOCATION NUMBER = I-#32
STREET NAME APPROACH #1= RTE 128 NB
STREET NAME APPROACH #2= MIDDLESEX
STREET NAME APPROACH #3= RTE 128 SB
STREET NAME APPROACH #4= MIDDLESEX

COMMUNITY = BURLINGTON
DATE COUNTED = 6/19/90
E' = = 7/10/90
E' = =
E' = =
E' = =

CUMULATIVE VOLUME FIGURES

PERIOD	1	2	3	4	TR1	TR2	TR3	TR4	5	6	7	8
6:30-6:45	0	0	0	0	0	0	0	0	0	0	0	0
6:45-7:00	38	60	67	160	4	11	6	13	18	37	24	137
7:00-7:15	63	115	130	316	8	17	16	19	41	85	61	286
7:15-7:30	96	184	200	500	12	28	28	29	52	134	95	470
7:30-7:45	154	231	308	639	18	39	42	43	83	200	148	680
7:45-8:00	224	283	392	828	23	45	55	52	101	268	204	937
8:00-8:15	285	329	485	1017	30	54	62	70	125	346	266	1211
8:15-8:30	373	396	564	1255	36	60	88	84	151	411	314	1465
8:30-8:45	437	464	651	1477	42	69	101	101	176	470	358	1696
8:45-9:00	489	500	736	1683	48	83	117	115	206	524	420	1940
9:00-9:15	530	562	796	1801	57	90	126	122	230	583	466	2093
9:15-9:30	563	608	848	1900	60	107	137	128	261	610	525	2229
9:30-9:45	591	652	892	2059	68	116	159	140	295	663	556	2398

CUMULATIVE VOLUME FIGURES

PERIOD	TR5	TR6	TR7	TR8	9	10
6:30-6:45	0	0	0	0		
6:45-7:00	4	13	4	10		
7:00-7:15	4	22	9	18		
7:15-7:30	8	29	14	27		
7:30-7:45	11	38	17	34		
7:45-8:00	16	40	19	41		
8:00-8:15	23	49	28	53		
8:15-8:30	28	56	37	60		
8:30-8:45	37	67	45	65		
8:45-9:00	42	75	59	72		
9:00-9:15	48	82	71	82		
9:15-9:30	57	88	90	89		
9:30-9:45	62	96	97	96		

ACTUAL TIME PERIOD VOLUME FIGURE

PERIOD	R1	S1	L1	TRR1	TRS1	TRL1	R2	S2	L2	TRR2	TRS2	TRL2
6:30-6:45	0	0	0	0	0	0	0	0	0	0	0	0
6:45-7:00	38	60	67	160	4	11	6	13	18	37	24	137
7:00-7:15	25	55	63	156	4	6	10	6	23	48	37	149
7:15-7:30	33	69	70	184	4	11	12	10	11	49	34	184
7:30-7:45	58	47	108	139	6	11	14	14	31	66	53	210
7:45-8:00	70	52	84	189	5	6	13	9	18	68	56	257
8:00-8:15	61	46	93	189	7	9	7	18	24	78	62	274
8:15-8:30	88	67	79	238	6	6	26	14	26	65	48	254
8:30-8:45	64	68	87	222	6	9	13	17	25	59	44	231
8:45-9:00	52	36	85	206	6	14	16	14	30	54	62	244
9:00-9:15	41	62	60	118	9	7	9	7	24	59	46	153
9:15-9:30	33	46	52	99	3	17	11	6	31	27	59	136
9:30-9:45	28	44	44	159	8	9	22	12	34	53	31	169
TOTAL	591	652	892	2059	68	116	159	140	295	663	556	2398

LOCATION NUMBER = I-#32
STREET NAME APPROACH #1= RTE 128 NB
STREET NAME APPROACH #2= MIDDLESEX
STREET NAME APPROACH #3= RTE 128 SB
STREET NAME APPROACH #4= MIDDLESEX

COMMUNITY = BURLINGTON
DATE COUNTED = 6/19/90
E' = = 7/10/90
E' = =
E' = =
E' = =

ACTUAL TIME PERIOD VOLUME FIGURE

PERIOD	R3	S3	L3	TRR3	TRS3	TRL3	R4	S4	L4	TRR4	TRS4	TRL4
6:30-6:45	0	0	0	0								
6:45-7:00	4	13	4	10	0	0	0	0	0	0	0	0
7:00-7:15	0	9	5	8	0	0	0	0	0	0	0	0
7:15-7:30	4	7	5	9	0	0	0	0	0	0	0	0
7:30-7:45	3	9	3	7	0	0	0	0	0	0	0	0
7:45-8:00	5	2	2	7	0	0	0	0	0	0	0	0
8:00-8:15	7	9	9	12	0	0	0	0	0	0	0	0
8:15-8:30	5	7	9	7	0	0	0	0	0	0	0	0
8:30-8:45	9	11	8	5	0	0	0	0	0	0	0	0
8:45-9:00	5	8	14	7	0	0	0	0	0	0	0	0
9:00-9:15	6	7	12	10	0	0	0	0	0	0	0	0
9:15-9:30	9	6	19	7	0	0	0	0	0	0	0	0
9:30-9:45	5	8	7	7	0	0	0	0	0	0	0	0
TOTAL	62	96	97	96	0	0	0	0	0	0	0	0

ACTUAL TIME PERIOD VOLUME FIGURE

PERIOD	ENTER 1	EXIT	ENTER 2	EXIT	ENTER 3	EXIT	ENTER 4	EXIT
6:30-6:45	0	0	0	0	0	0	0	0
6:45-7:00	340	56	235	92	31	219	0	239
7:00-7:15	309	67	273	77	22	231	0	229
7:15-7:30	371	68	300	94	25	268	0	266
7:30-7:45	369	89	388	129	22	294	0	267
7:45-8:00	406	83	421	102	16	332	0	326
8:00-8:15	405	94	463	121	37	351	0	339
8:15-8:30	484	98	433	97	28	353	0	397
8:30-8:45	456	83	389	110	33	330	0	355
8:45-9:00	399	78	420	111	34	316	0	348
9:00-9:15	297	75	298	83	35	248	0	224
9:15-9:30	250	44	270	85	41	216	0	216
9:30-9:45	292	83	321	65	27	255	0	237
TOTAL	4378	918	4211	1166	351	3413	0	3443

	APPROACH 1				APPROACH 2			
PERIOD	VOL	PHF	VOL T	% TKS	VOL	PHF	VOL T	% TKS
6:30-7:30	1020	0.69	540	52.94	808	0.67	699	86.51
6:45-7:45	1389	0.94	696	50.11	1196	0.77	1028	85.95
7:00-8:00	1455	0.90	721	49.55	1382	0.82	1211	87.63
7:15-8:15	1551	0.96	760	49.00	1572	0.85	1391	88.49
7:30-8:30	1664	0.86	811	48.74	1705	0.92	1491	87.45
7:45-8:45	1751	0.90	892	50.94	1706	0.92	1496	87.69
8:00-9:00	1744	0.90	918	52.64	1705	0.92	1475	86.51
8:15-9:15	1636	0.85	847	51.77	1540	0.89	1319	85.65
8:30-9:30	1402	0.77	716	51.07	1377	0.82	1174	85.26
8:45-9:45	1238	0.78	655	52.91	1309	0.78	1093	83.50

LOCATION NUMBER = I-#32
STREET NAME APPROACH #1= RTE 128 NB
STREET NAME APPROACH #2= MIDDLESEX
STREET NAME APPROACH #3= RTE 128 SB
STREET NAME APPROACH #4= MIDDLESEX

COMMUNITY = BURLINGTON
DATE COUNTED = 6/19/90
E' = = 7/10/90
E' = =
E' = =
E' = =

	APPROACH 3				APPROACH 4				INTERSECTION APP. PEAK HR. VOLUME	
PERIOD	VOL	PHF	VOL T	% TKS	VOL	PHF	VOL T	% TKS	/PEAK HOUR	3581
6:30-7:30	78	0.63	27	34.62	0	ERR	0	ERR	1906	0.68
6:45-7:45	100	0.81	34	34.00	0	ERR	0	ERR	2685	0.86
7:00-8:00	85	0.85	31	36.47	0	ERR	0	ERR	2922	0.87
7:15-8:15	100	0.68	35	35.00	0	ERR	0	ERR	3223	0.89
7:30-8:30	103	0.70	33	32.04	0	ERR	0	ERR	3472	0.92
7:45-8:45	114	0.77	31	27.19	0	ERR	0	ERR	3571	0.94
8:00-9:00	132	0.89	31	23.48	0	ERR	0	ERR	3581	0.95
8:15-9:15	130	0.93	29	22.31	0	ERR	0	ERR	3306	0.87
8:30-9:30	143	0.87	29	20.28	0	ERR	0	ERR	2922	0.83
8:45-9:45	137	0.84	31	22.63	0	ERR	0	ERR	2684	0.79

	APPRO. 1			APPRO. 2			APPRO 3.			APPRO. 4		
PERIOD	R	S	L	R	S	L	R	S	L	R	S	L
6:30-7:30	596	196	228	162	124	522	35	29	14	0	0	0
6:45-7:45	793	249	347	242	191	763	45	38	17	0	0	0
7:00-8:00	854	242	359	280	219	883	43	27	15	0	0	0
7:15-8:15	923	236	392	307	256	1009	54	27	19	0	0	0
7:30-8:30	1032	236	396	337	274	1094	53	27	23	0	0	0
7:45-8:45	1121	257	373	329	268	1109	57	29	28	0	0	0
8:00-9:00	1120	242	382	318	279	1108	57	35	40	0	0	0
8:15-9:15	1029	260	347	301	252	987	54	33	43	0	0	0
8:30-9:30	835	236	331	248	255	874	58	32	53	0	0	0
8:45-9:45	736	214	288	251	237	821	56	29	52	0	0	0
TOTAL	2650	720	1008	822	696	2693	158	96	97	0	0	0

	EXIT	VOL.ENTER APP 1	EXIT	VOL.ENTER APP 2	EXIT	VOL.ENTER APP 3	EXIT	VOL.ENTER APP 4
PERIOD								
6:30-7:30	191	1020	263	808	718	78	734	0
6:45-7:45	280	1389	392	1196	1012	100	1001	0
7:00-8:00	307	1455	402	1382	1125	85	1088	0
7:15-8:15	334	1551	446	1572	1245	100	1198	0
7:30-8:30	364	1664	449	1705	1330	103	1329	0
7:45-8:45	358	1751	430	1706	1366	114	1417	0
8:00-9:00	353	1744	439	1705	1350	132	1439	0
8:15-9:15	334	1636	401	1540	1247	130	1324	0
8:30-9:30	280	1402	389	1377	1110	143	1143	0
8:45-9:45	280	1238	344	1309	1035	137	1025	0
TOTAL	918	4378	1166	4211	3413	351	3443	0

LOCATION NUMBER = I-#32
STREET NAME APPROACH #1= RTE 128 NB
STREET NAME APPROACH #2= MIDDLESEX
STREET NAME APPROACH #3= RTE 128 SB
STREET NAME APPROACH #4= MIDDLESEX

COMMUNITY = BURLINGTON
DATE COUNTED = 6/19/90
E° = = 7/10/90
E° = = 7/17/90
E° = =
E° = =

CUMULATIVE VOLUME FIGURES

PERIOD	1	2	3	4	TR1	TR2	TR3	TR4	5	6	7	8
11:00-11:15	64	50	76	135	7	7	21	13	53	39	44	135
11:15-11:30	149	112	133	270	11	10	28	29	116	82	96	303
11:30-11:45	267	182	177	417	20	20	40	44	180	125	158	514
11:45-12:00	396	235	231	592	31	26	49	58	277	193	202	736
12:00-12:15	549	279	300	781	44	34	51	61	363	268	243	951
12:15-12:30	686	324	362	907	56	44	70	80	454	316	300	1165
12:30-12:45	869	387	443	1047	64	52	78	91	536	374	351	1337
12:45-1:00	1055	458	515	1202	76	65	91	113	655	420	405	1491
1:00-1:15	1198	525	562	1350	85	70	107	130	743	464	474	1668
1:15-1:30	1388	599	644	1455	96	81	114	147	854	502	548	1821
N/A												
N/A												
N/A												

CUMULATIVE VOLUME FIGURES

PERIOD	TR5	TR6	TR7	TR8
11:00-11:15	6	8	13	13
11:15-11:30	12	21	23	22
11:30-11:45	18	27	28	33
11:45-12:00	22	34	34	39
12:00-12:15	29	48	46	46
12:15-12:30	33	51	56	55
12:30-12:45	42	54	66	61
12:45-1:00	43	62	73	68
1:00-1:15	49	77	81	74
1:15-1:30	53	84	90	79
N/A				
N/A				
N/A				

ACTUAL TIME PERIOD VOLUME FIGURE

PERIOD	R1	S1	L1	TRR1	TRS1	TRL1	R2	S2	L2	TRR2	TRS2	TRL2
11:00-11:15	64	50	76	135	7	7	21	13	53	39	44	135
11:15-11:30	85	62	57	135	4	3	7	16	63	43	52	168
11:30-11:45	118	70	44	147	9	10	12	15	64	43	62	211
11:45-12:00	129	53	54	175	11	6	9	14	97	68	44	222
12:00-12:15	153	44	69	189	13	8	2	3	86	75	41	215
12:15-12:30	137	45	62	126	12	10	25	19	91	48	57	214
12:30-12:45	183	63	81	140	8	8	2	11	82	58	51	172
12:45-1:00	186	71	72	155	12	13	13	22	119	46	54	154
1:00-1:15	143	67	47	148	9	5	16	17	88	44	69	177
1:15-1:30	190	74	82	105	11	11	7	17	111	38	74	153
N/A												
N/A												
N/A												
TOTAL	1388	599	644	1455	96	81	114	147	854	502	548	1821

LOCATION NUMBER = I-#32
STREET NAME APPROACH #1= RTE 128 NB
STREET NAME APPROACH #2= MIDDLESEX
STREET NAME APPROACH #3= RTE 128 SB
STREET NAME APPROACH #4= MIDDLESEX

COMMUNITY = BURLINGTON
DATE COUNTED = 6/19/90
E' = = 7/10/90
E' = =
E' = =
E' = =

ACTUAL TIME PERIOD VOLUME FIGURE

PERIOD	R3	S3	L3	TRR3	TRS3	TRL3	R4	S4	L4	TRR4	TRS4	TRL4
11:00-11:15	6	8	13	13								
11:15-11:30	6	13	10	9	0	0	0	0	0	0	0	0
11:30-11:45	6	6	5	11	0	0	0	0	0	0	0	0
11:45-12:00	4	7	6	6	0	0	0	0	0	0	0	0
12:00-12:15	7	14	12	7	0	0	0	0	0	0	0	0
12:15-12:30	4	3	10	9	0	0	0	0	0	0	0	0
12:30-12:45	9	3	10	6	0	0	0	0	0	0	0	0
12:45-1:00	1	8	7	7	0	0	0	0	0	0	0	0
1:00-1:15	6	15	8	6	0	0	0	0	0	0	0	0
1:15-1:30	4	7	9	5	0	0	0	0	0	0	0	0
N/A												
N/A												
N/A												
TOTAL	53	84	90	79	0	0	0	0	0	0	0	0

ACTUAL TIME PERIOD VOLUME FIGURE

PERIOD	ENTER 1	EXIT	ENTER 2	EXIT	ENTER 3	EXIT	ENTER 4	EXIT
11:00-11:15	339	68	305	102	40	245	0	269
11:15-11:30	346	63	349	75	38	297	0	298
11:30-11:45	398	61	407	71	28	354	0	347
11:45-12:00	428	84	454	70	23	383	0	368
12:00-12:15	476	91	422	91	40	358	0	398
12:15-12:30	392	76	454	85	26	362	0	349
12:30-12:45	483	63	376	104	28	325	0	395
12:45-1:00	509	67	408	93	23	356	0	424
1:00-1:15	419	75	411	64	35	341	0	385
1:15-1:30	473	52	400	102	25	349	0	395
N/A	0	0	0	0	0	0	0	0
N/A	0	0	0	0	0	0	0	0
N/A	0	0	0	0	0	0	0	0
TOTAL	4263	700	3986	857	306	3370	0	3628

	APPROACH 1				APPROACH 2			
PERIOD	VOL	PHF	VOL T	% TKS	VOL	PHF	VOL T	% TKS
11:00-12:00	1511	0.88	649	42.95	1515	0.83	1131	74.65
11:15-12:15	1648	0.87	710	43.08	1632	0.90	1244	76.23
11:30-12:30	1694	0.89	716	42.27	1737	0.96	1300	74.84
11:45-12:45	1779	0.92	706	39.69	1706	0.94	1265	74.15
12:00-1:00	1860	0.91	694	37.31	1660	0.91	1185	71.39
12:15-1:15	1803	0.89	646	35.83	1649	0.91	1144	69.38
12:30-1:30	1884	0.93	625	33.17	1595	0.97	1090	68.34
N/A								
N/A								
N/A								

LOCATION NUMBER = I-#32
STREET NAME APPROACH #1= RTE 128 NB
STREET NAME APPROACH #2= MIDDLESEX
STREET NAME APPROACH #3= RTE 128 SB
STREET NAME APPROACH #4= MIDDLESEX

COMMUNITY = BURLINGTON
DATE COUNTED = 6/19/90
E' = = 7/10/90
E' = =
E' = =
E' = =

	APPROACH 3				APPROACH 4				INTERSECTION	APP. PEAK HR.	VOLUME
PERIOD	VOL	PHF	VOL T	% TKS	VOL	PHF	VOL T	% TKS	/PEAK HOUR		3637
11:00-12:00	129	0.81	39	30.23	0	ERR	0	ERR	3155	0.87	
11:15-12:15	129	0.81	33	25.58	0	ERR	0	ERR	3409	0.91	
11:30-12:30	117	0.73	33	28.21	0	ERR	0	ERR	3548	0.95	
11:45-12:45	117	0.73	28	23.93	0	ERR	0	ERR	3602	0.96	
12:00-1:00	117	0.73	29	24.79	0	ERR	0	ERR	3637	0.97	
12:15-1:15	112	0.80	28	25.00	0	ERR	0	ERR	3564	0.95	
12:30-1:30	111	0.79	24	21.62	0	ERR	0	ERR	3590	0.95	
N/A									0	0.00	
N/A									0	0.00	
N/A									0	0.00	

	APPRO. 1			APPRO. 2			APPRO 3.			APPRO. 4		
PERIOD	R	S	L	R	S	L	R	S	L	R	S	L
11:00-12:00	988	266	257	242	260	1013	61	34	34	0	0	0
11:15-12:15	1131	266	251	259	247	1126	56	40	33	0	0	0
11:30-12:30	1174	257	263	282	255	1200	54	30	33	0	0	0
11:45-12:45	1232	249	298	287	240	1179	52	27	38	0	0	0
12:00-1:00	1269	268	323	269	258	1133	50	28	39	0	0	0
12:15-1:15	1218	287	298	252	300	1097	48	29	35	0	0	0
12:30-1:30	1250	315	319	224	315	1056	44	33	34	0	0	0
N/A												
N/A												
N/A												
TOTAL	2843	695	725	616	695	2675	132	84	90	0	0	0

	EXIT	VOL.ENTER APP 1	EXIT	VOL.ENTER APP 2	EXIT	VOL.ENTER APP 3	EXIT	VOL.ENTER APP 4
PERIOD								
11:00-12:00	276	1511	318	1515	1279	129	1282	0
11:15-12:15	299	1648	307	1632	1392	129	1411	0
11:30-12:30	312	1694	317	1737	1457	117	1462	0
11:45-12:45	314	1779	350	1706	1428	117	1510	0
12:00-1:00	297	1860	373	1660	1401	117	1566	0
12:15-1:15	281	1803	346	1649	1384	112	1553	0
12:30-1:30	257	1884	363	1595	1371	111	1599	0
TOTAL	700	4263	857	3986	3370	306	3628	0

LOCATION NUMBER = I-#32
STREET NAME APPROACH #1= RTE 128 NB
STREET NAME APPROACH #2= MIDDLESEX
STREET NAME APPROACH #3= RTE 128 SB
STREET NAME APPROACH #4= MIDDLESEX

COMMUNITY = BURLINGTON
DATE COUNTED = 6/19/90
E* = = 7/10/90
E* = =
E* = =
E* = =

CUMULATIVE VOLUME FIGURES

PERIOD	1	2	3	4	TR1	TR2	TR3	TR4	5	6	7	8
2:30-2:45	0	0	0	0	0	0	0	0	0	0	0	0
2:45-3:00	0	0	0	0	0	0	0	0	0	0	0	0
3:00-3:15	174	80	69	86	10	7	9	1	124	73	82	132
3:15-3:30	305	191	144	165	22	18	20	12	282	120	140	250
3:30-3:45	487	259	218	257	33	28	32	23	492	162	208	372
3:45-4:00	679	348	284	358	42	40	49	31	662	225	288	520
4:00-4:15	884	397	383	399	46	48	57	37	856	284	356	670
4:15-4:30	1039	462	432	470	58	57	76	45	1057	374	418	813
4:30-4:45	1281	597	511	601	63	60	81	51	1247	444	496	981
4:45-5:00	1491	688	603	715	69	66	85	59	1430	542	579	1156
5:00-5:15	1733	758	702	799	74	68	93	64	1617	637	655	1336
5:15-5:30	1950	826	780	891	80	75	99	74	1758	759	713	1543
5:30-5:45	2225	935	881	1060	85	79	104	82	1878	871	765	1722
5:45-6:00	2396	992	967	1180	88	81	106	89	1998	954	825	1906
6:00-6:15	2613	1067	1042	1308	94	83	111	93	2157	1050	882	2067
6:15-6:30	2802	1149	1114	1401	98	84	121	99	2306	1122	937	2228

CUMULATIVE VOLUME FIGURES

PERIOD	TR5	TR6	TR7	TR8
2:30-2:45	0	0	0	0
2:45-3:00	0	0	0	0
3:00-3:15	5	11	8	10
3:15-3:30	17	19	17	14
3:30-3:45	34	21	22	20
3:45-4:00	39	28	25	28
4:00-4:15	45	41	31	33
4:15-4:30	49	46	39	36
4:30-4:45	51	50	45	40
4:45-5:00	53	54	47	44
5:00-5:15	57	56	48	47
5:15-5:30	59	60	48	54
5:30-5:45	61	61	51	56
5:45-6:00	64	68	54	62
6:00-6:15	65	68	58	62
6:15-6:30	68	68	58	63

ACTUAL TIME PERIOD VOLUME FIGURE

PERIOD	R1	S1	L1	TRR1	TRS1	TRL1	R2	S2	L2	TRR2	TRS2	TRL2
2:30-2:45	0	0	0	0	0	0	0	0	0	0	0	0
2:45-3:00	0	0	0	0	0	0	0	0	0	0	0	0
3:00-3:15	174	80	69	86	10	7	9	1	124	73	82	132
3:15-3:30	131	111	75	79	12	11	11	11	158	47	58	118
3:30-3:45	182	68	74	92	11	10	12	11	210	42	68	122
3:45-4:00	192	89	66	101	9	12	17	8	170	63	80	148
4:00-4:15	205	49	99	41	4	8	8	6	194	59	68	150
4:15-4:30	155	65	49	71	12	9	19	8	201	90	62	143
4:30-4:45	242	135	79	131	5	3	5	6	190	70	78	168
4:45-5:00	210	91	92	114	6	6	4	8	183	98	83	175
5:00-5:15	242	70	99	84	5	2	8	5	187	95	76	180
5:15-5:30	217	68	78	92	6	7	6	10	141	122	58	207
5:30-5:45	275	109	101	169	5	4	5	8	120	112	52	179
5:45-6:00	171	57	86	120	3	2	2	7	120	83	60	184
6:00-6:15	217	75	75	128	6	2	5	4	159	96	57	161
6:15-6:30	189	82	72	93	4	1	10	6	149	72	55	161
TOTAL	2802	1149	1114	1401	98	84	121	99	2306	1122	937	2228

LOCATION NUMBER = I-#32
STREET NAME APPROACH #1= RTE 128 NB
STREET NAME APPROACH #2= MIDDLESEX
STREET NAME APPROACH #3= RTE 128 SB
STREET NAME APPROACH #4= MIDDLESEX

COMMUNITY = BURLINGTON
DATE COUNTED = 6/19/90
E' = = 7/10/90
E' = =
E' = =
E' = =

ACTUAL TIME PERIOD VOLUME FIGURE

PERIOD	R3	S3	L3	TRR3	TRS3	TRL3	R4	S4	L4	TRR4	TRS4	TRL4
2:30-2:45	0	0	0	0								
2:45-3:00	0	0	0	0	0	0	0	0	0	0	0	0
3:00-3:15	5	11	8	10	0	0	0	0	0	0	0	0
3:15-3:30	12	8	9	4	0	0	0	0	0	0	0	0
3:30-3:45	17	2	5	6	0	0	0	0	0	0	0	0
3:45-4:00	5	7	3	8	0	0	0	0	0	0	0	0
4:00-4:15	6	13	6	5	0	0	0	0	0	0	0	0
4:15-4:30	4	5	8	3	0	0	0	0	0	0	0	0
4:30-4:45	2	4	6	4	0	0	0	0	0	0	0	0
4:45-5:00	2	4	2	4	0	0	0	0	0	0	0	0
5:00-5:15	4	2	1	3	0	0	0	0	0	0	0	0
5:15-5:30	2	4	0	7	0	0	0	0	0	0	0	0
5:30-5:45	2	1	3	2	0	0	0	0	0	0	0	0
5:45-6:00	3	7	3	6	0	0	0	0	0	0	0	0
6:00-6:15	1	0	4	0	0	0	0	0	0	0	0	0
6:15-6:30	3	0	0	1	0	0	0	0	0	0	0	0
TOTAL	68	68	58	63	0	0	0	0	0	0	0	0

ACTUAL TIME PERIOD VOLUME FIGURE

PERIOD	ENTER 1	EXIT	ENTER 2	EXIT	ENTER 3	EXIT	ENTER 4	EXIT
2:30-2:45	0	0	0	0	0	0	0	0
2:45-3:00	0	0	0	0	0	0	0	0
3:00-3:15	426	93	421	91	34	346	0	351
3:15-3:30	419	66	403	102	33	399	0	288
3:30-3:45	437	56	465	107	30	411	0	358
3:45-4:00	469	87	486	91	23	416	0	384
4:00-4:15	406	80	485	118	30	397	0	326
4:15-4:30	361	114	523	65	20	421	0	304
4:30-4:45	595	79	517	88	16	498	0	463
4:45-5:00	519	106	551	104	12	455	0	417
5:00-5:15	502	105	551	108	10	442	0	408
5:15-5:30	468	132	544	94	13	422	0	377
5:30-5:45	663	118	476	109	8	413	0	507
5:45-6:00	439	92	456	97	19	364	0	361
6:00-6:15	503	101	482	78	5	401	0	410
6:15-6:30	441	82	453	77	4	396	0	343
TOTAL	6648	1311	6813	1329	257	5781	0	5297

	APPROACH 1				APPROACH 2			
PERIOD	VOL	PHF	VOL T	% TKS	VOL	PHF	VOL T	% TKS
2:30-3:30	845	0.50	205	24.26	824	0.49	510	61.89
2:45-3:45	1282	0.73	318	24.80	1289	0.69	742	57.56
3:00-4:00	1751	0.93	440	25.13	1775	0.91	1033	58.20
3:15-4:15	1731	0.92	390	22.53	1839	0.95	1023	55.63
3:30-4:30	1673	0.89	380	22.71	1959	0.94	1095	55.90
3:45-4:45	1831	0.77	406	22.17	2011	0.96	1179	58.63
4:00-5:00	1881	0.79	410	21.80	2076	0.94	1244	59.92
4:15-5:15	1977	0.83	448	22.66	2142	0.97	1318	61.53
4:30-5:30	2084	0.88	461	22.12	2163	0.98	1410	65.19
4:45-5:45	2152	0.81	500	23.23	2122	0.96	1437	67.72
5:00-6:00	2072	0.78	499	24.08	2027	0.92	1408	69.46
5:15-6:15	2073	0.78	544	26.24	1958	0.90	1371	70.02
5:30-6:30	2046	0.77	537	26.25	1867	0.97	1272	68.13

LOCATION NUMBER = I-#32
STREET NAME APPROACH #1= RTE 128 NB
STREET NAME APPROACH #2= MIDDLESEX
STREET NAME APPROACH #3= RTE 128 SB
STREET NAME APPROACH #4= MIDDLESEX

COMMUNITY = BURLINGTON
DATE COUNTED = 6/19/90
E' = = 7/10/90
E' = =
E' = =
E' = =

	APPROACH 3				APPROACH 4				INTERSECTION APP. PEAK HR. VOLUME	
PERIOD	VOL	PHF	VOL T	% TKS	VOL	PHF	VOL T	% TKS	/PEAK HOUR	4317
2:30-3:30	67	0.49	14	20.90	0	ERR	0	ERR	1736	0.49
2:45-3:45	97	0.71	20	20.62	0	ERR	0	ERR	2668	0.72
3:00-4:00	120	0.88	28	23.33	0	ERR	0	ERR	3646	0.93
3:15-4:15	116	0.88	23	19.83	0	ERR	0	ERR	3686	0.94
3:30-4:30	103	0.86	22	21.36	0	ERR	0	ERR	3735	0.95
3:45-4:45	89	0.74	20	22.47	0	ERR	0	ERR	3931	0.87
4:00-5:00	78	0.65	16	20.51	0	ERR	0	ERR	4035	0.89
4:15-5:15	58	0.73	14	24.14	0	ERR	0	ERR	4177	0.93
4:30-5:30	51	0.80	18	35.29	0	ERR	0	ERR	4298	0.95
4:45-5:45	43	0.83	16	37.21	0	ERR	0	ERR	4317	0.94
5:00-6:00	50	0.66	18	36.00	0	ERR	0	ERR	4149	0.90
5:15-6:15	45	0.59	15	33.33	0	ERR	0	ERR	4076	0.89
5:30-6:30	36	0.47	9	25.00	0	ERR	0	ERR	3949	0.86

	APPRO. 1			APPRO. 2			APPRO 3.			APPRO. 4		
PERIOD	R	S	L	R	S	L	R	S	L	R	S	L
2:30-3:30	470	213	162	140	152	532	31	19	17	0	0	0
2:45-3:45	744	292	246	194	231	864	54	21	22	0	0	0
3:00-4:00	1037	390	324	274	319	1182	67	28	25	0	0	0
3:15-4:15	1023	353	355	259	310	1270	63	30	23	0	0	0
3:30-4:30	1039	307	327	310	311	1338	54	27	22	0	0	0
3:45-4:45	1138	368	325	331	316	1364	37	29	23	0	0	0
4:00-5:00	1169	367	345	353	319	1404	30	26	22	0	0	0
4:15-5:15	1249	389	339	389	326	1427	26	15	17	0	0	0
4:30-5:30	1332	386	366	408	324	1431	28	14	9	0	0	0
4:45-5:45	1403	360	389	450	300	1372	26	11	6	0	0	0
5:00-6:00	1370	323	379	433	276	1318	29	14	7	0	0	0
5:15-6:15	1389	329	355	431	256	1271	23	12	10	0	0	0
5:30-6:30	1362	341	343	385	249	1233	18	8	10	0	0	0
TOTAL	4203	1247	1198	1243	1036	4534	131	68	58	0	0	0

	EXIT	VOL.ENTER APP 1	EXIT	VOL.ENTER APP 2	EXIT	VOL.ENTER APP 3	EXIT	VOL.ENTER APP 4
PERIOD								
2:30-3:30	159	845	193	824	745	67	639	0
2:45-3:45	215	1282	300	1289	1156	97	997	0
3:00-4:00	302	1751	391	1775	1572	120	1381	0
3:15-4:15	289	1731	418	1839	1623	116	1356	0
3:30-4:30	337	1673	381	1959	1645	103	1372	0
3:45-4:45	360	1831	362	2011	1732	89	1477	0
4:00-5:00	379	1881	375	2076	1771	78	1510	0
4:15-5:15	404	1977	365	2142	1816	58	1592	0
4:30-5:30	422	2084	394	2163	1817	51	1665	0
4:45-5:45	461	2152	415	2122	1732	43	1709	0
5:00-6:00	447	2072	408	2027	1641	50	1653	0
5:15-6:15	443	2073	378	1958	1600	45	1655	0
5:30-6:30	393	2046	361	1867	1574	36	1621	0
TOTAL	1311	6648	1329	6813	5781	257	5297	0

LOCATION NUMBER = I-#32A
STREET NAME APPROACH #1= RTE 128 NB
STREET NAME APPROACH #2=
STREET NAME APPROACH #3= RTE 128 SB
STREET NAME APPROACH #4= RTE 3

COMMUNITY = BURLINGTON
DATE COUNTED = 6/19/90
E' = = 7/10/90
E' = =
E' = =
E' = =

CUMULATIVE VOLUME FIGURES

PERIOD	1	2	3	4	TR1	TR2	TR3	TR4	5	6	7	8
6:30-6:45	0			0	0			0	0			0
6:45-7:00	356			197	21			16	252			276
7:00-7:15	785			505	46			37	565			635
7:15-7:30	1221			865	68			48	850			1085
7:30-7:45	1775			1245	90			63	1180			1691
7:45-8:00	2277			1628	119			84	1561			2287
8:00-8:15	2629			1893	146			100	1812			2719
8:15-8:30	3043			2185	170			117	2075			3182
8:30-8:45	3537			2513	197			136	2415			3673
8:45-9:00	3894			2824	228			158	2727			4079
9:00-9:15	4153			3008	246			184	2929			4348
9:15-9:30	4362			3192	262			207	3120			4565
9:30-9:45	4630			3437	281			234	3389			4845

CUMULATIVE VOLUME FIGURES

PERIOD	TR5	TR6	TR7	TR8
6:30-6:45	0			0
6:45-7:00	7			10
7:00-7:15	21			20
7:15-7:30	32			31
7:30-7:45	52			38
7:45-8:00	67			59
8:00-8:15	84			84
8:15-8:30	109			106
8:30-8:45	137			132
8:45-9:00	189			153
9:00-9:15	209			169
9:15-9:30	224			188
9:30-9:45	254			217

ACTUAL TIME PERIOD VOLUME FIGURE

PERIOD	R1	S1	L1	TRR1	TRS1	TRL1	R2	S2	L2	TRR2	TRS2	TRL2
6:30-6:45	0			0	0			0	0			0
6:45-7:00	356	0	0	197	21	0	0	16	252	0	0	276
7:00-7:15	429	0	0	308	25	0	0	21	313	0	0	359
7:15-7:30	436	0	0	360	22	0	0	11	285	0	0	450
7:30-7:45	554	0	0	380	22	0	0	15	330	0	0	606
7:45-8:00	502	0	0	383	29	0	0	21	381	0	0	596
8:00-8:15	352	0	0	265	27	0	0	16	251	0	0	432
8:15-8:30	414	0	0	292	24	0	0	17	263	0	0	463
8:30-8:45	494	0	0	328	27	0	0	19	340	0	0	491
8:45-9:00	357	0	0	311	31	0	0	22	312	0	0	406
9:00-9:15	259	0	0	184	18	0	0	26	202	0	0	269
9:15-9:30	209	0	0	184	16	0	0	23	191	0	0	217
9:30-9:45	268	0	0	245	19	0	0	27	269	0	0	280
TOTAL	4630	0	0	3437	281	0	0	234	3389	0	0	4845

LOCATION NUMBER = I-#32A
STREET NAME APPROACH #1= RTE 128 NB
STREET NAME APPROACH #2=
STREET NAME APPROACH #3= RTE 128 SB
STREET NAME APPROACH #4= RTE 3

COMMUNITY = BURLINGTON
OATE COUNTEO = 6/19/90
E' = = 7/10/90
E' = =
E' = =
E' = =

ACTUAL TIME PERIOD VOLUME FIGURE

PERIOD	R3	S3	L3	TRR3	TRS3	TRL3	R4	S4	L4	TRR4	TRS4	TRL4
6:30-6:45	0			0								
6:45-7:00	7	0	0	10	0	0	0	0	0	0	0	0
7:00-7:15	14	0	0	10	0	0	0	0	0	0	0	0
7:15-7:30	11	0	0	11	0	0	0	0	0	0	0	0
7:30-7:45	20	0	0	7	0	0	0	0	0	0	0	0
7:45-8:00	15	0	0	21	0	0	0	0	0	0	0	0
8:00-8:15	17	0	0	25	0	0	0	0	0	0	0	0
8:15-8:30	25	0	0	22	0	0	0	0	0	0	0	0
8:30-8:45	28	0	0	26	0	0	0	0	0	0	0	0
8:45-9:00	52	0	0	21	0	0	0	0	0	0	0	0
9:00-9:15	20	0	0	16	0	0	0	0	0	0	0	0
9:15-9:30	15	0	0	19	0	0	0	0	0	0	0	0
9:30-9:45	30	0	0	29	0	0	0	0	0	0	0	0
TOTAL	254	0	0	217	0	0	0	0	0	0	0	0

ACTUAL TIME PERIOD VOLUME FIGURE

PERIOD	ENTER 1	EXIT	ENTER 2	EXIT	ENTER 3	EXIT	ENTER 4	EXIT
6:30-6:45	0	0	0	0	0	0	0	0
6:45-7:00	574	0	544	17	17	549	0	569
7:00-7:15	762	0	693	24	24	697	0	758
7:15-7:30	818	0	746	22	22	757	0	807
7:30-7:45	956	0	951	27	27	958	0	949
7:45-8:00	914	0	998	36	36	1006	0	906
8:00-8:15	644	0	699	42	42	710	0	633
8:15-8:30	730	0	743	47	47	750	0	723
8:30-8:45	849	0	850	54	54	858	0	841
8:45-9:00	699	0	740	73	73	749	0	690
9:00-9:15	461	0	497	36	36	489	0	469
9:15-9:30	409	0	431	34	34	424	0	416
9:30-9:45	532	0	576	59	59	568	0	540
TOTAL	8348	0	8468	471	471	8515	0	8301

	APPROACH 1				APPROACH 2			
PERIOD	VOL	PHF	VOL T	% TKS	VOL	PHF	VOL T	% TKS
6:30-7:30	2154	0.66	933	43.31	1983	0.66	1085	54.72
6:45-7:45	3110	0.81	1335	42.93	2934	0.77	1691	57.63
7:00-8:00	3450	0.90	1529	44.32	3388	0.85	2011	59.36
7:15-8:15	3332	0.87	1488	44.66	3394	0.85	2084	61.40
7:30-8:30	3244	0.85	1422	43.83	3391	0.85	2097	61.84
7:45-8:45	3137	0.86	1375	43.83	3290	0.82	1982	60.24
8:00-9:00	2922	0.86	1305	44.66	3032	0.89	1792	59.10
8:15-9:15	2739	0.81	1215	44.36	2830	0.83	1629	57.56
8:30-9:30	2418	0.71	1099	45.45	2518	0.74	1383	54.92
8:45-9:45	2101	0.75	1008	47.98	2244	0.76	1172	52.23

LOCATION NUMBER = I-#32A
STREET NAME APPROACH #1= RTE 128 NB
STREET NAME APPROACH #2=
STREET NAME APPROACH #3= RTE 128 SB
STREET NAME APPROACH #4= RTE 3

COMMUNITY = BURLINGTON
DATE COUNTED = 6/19/90
E' = = 7/10/90
E' = =
E' = =
E' = =

	APPROACH 3				APPROACH 4				INTERSECTION APP. PEAK HR. VOLUME	
PERIOD	VOL	PHF	VOL T	% TKS	VOL	PHF	VOL T	% TKS	/PEAK HOUR	6947
6:30-7:30	63	0.66	31	49.21	0	ERR	0	ERR	4200	0.66
6:45-7:45	90	0.83	38	42.22	0	ERR	0	ERR	6134	0.79
7:00-8:00	109	0.76	49	44.95	0	ERR	0	ERR	6947	0.89
7:15-8:15	127	0.76	64	50.39	0	ERR	0	ERR	6853	0.88
7:30-8:30	152	0.81	75	49.34	0	ERR	0	ERR	6787	0.87
7:45-8:45	179	0.83	94	52.51	0	ERR	0	ERR	6606	0.85
8:00-9:00	216	0.74	94	43.52	0	ERR	0	ERR	6170	0.88
8:15-9:15	210	0.72	85	40.48	0	ERR	0	ERR	5779	0.82
8:30-9:30	197	0.67	82	41.62	0	ERR	0	ERR	5133	0.73
8:45-9:45	202	0.69	85	42.08	0	ERR	0	ERR	4547	0.75

	APPRO. 1			APPRO. 2			APPRO 3.			APPRO. 4		
PERIOD	R	S	L	R	S	L	R	S	L	R	S	L
6:30-7:30	2086	68	0	0	48	1935	63	0	0	0	0	0
6:45-7:45	3020	90	0	0	63	2871	90	0	0	0	0	0
7:00-8:00	3352	98	0	0	68	3320	109	0	0	0	0	0
7:15-8:15	3232	100	0	0	63	3331	127	0	0	0	0	0
7:30-8:30	3142	102	0	0	69	3322	152	0	0	0	0	0
7:45-8:45	3030	107	0	0	73	3217	179	0	0	0	0	0
8:00-9:00	2813	109	0	0	74	2958	216	0	0	0	0	0
8:15-9:15	2639	100	0	0	84	2746	210	0	0	0	0	0
8:30-9:30	2326	92	0	0	90	2428	197	0	0	0	0	0
8:45-9:45	2017	84	0	0	98	2146	202	0	0	0	0	0
TOTAL	8067	281	0	0	234	8234	471	0	0	0	0	0

	EXIT	VOL.ENTER APP 1	EXIT	VOL.ENTER APP 2	EXIT	VOL.ENTER APP 3	EXIT	VOL.ENTER APP 4
PERIOD								
6:30-7:30	0	2154	63	1983	2003	63	2134	0
6:45-7:45	0	3110	90	2934	2961	90	3083	0
7:00-8:00	0	3450	109	3388	3418	109	3420	0
7:15-8:15	0	3332	127	3394	3431	127	3295	0
7:30-8:30	0	3244	152	3391	3424	152	3211	0
7:45-8:45	0	3137	179	3290	3324	179	3103	0
8:00-9:00	0	2922	216	3032	3067	216	2887	0
8:15-9:15	0	2739	210	2830	2846	210	2723	0
8:30-9:30	0	2418	197	2518	2520	197	2416	0
8:45-9:45	0	2101	202	2244	2230	202	2115	0
TOTAL	0	8348	471	8468	8515	471	8301	0

LOCATION NUMBER = I-32A
STREET NAME APPROACH #1= PTE 128 NB
STREET NAME APPROACH #2=
STREET NAME APPROACH #3= RTE 128 SB
STREET NAME APPROACH #4= RTE 3

COMMUNITY = BURLINGTON
DATE COUNTED = 6/19/90
E' = = 7/10/90
E' = =
E' = =
E' = =

CUMULATIVE VOLUME FIGURES

PERIOD	1	2	3	4	TR1	TR2	TR3	TR4	5	6	7	8
11:00-11:15	168			162	11			21	183			179
11:15-11:30	361			348	31			40	398			358
11:30-11:45	545			525	51			65	632			511
11:45-12:00	727			716	71			93	865			728
12:00-12:15	891			883	83			124	1092			906
12:15-12:30	1091			1126	101			148	1294			1082
12:30-12:45	1269			1357	120			174	1509			1280
12:45-1:00	1423			1568	143			194	1717			1485
1:00-1:15	1627			1797	162			224	1943			1691
1:15-1:30	1770			2002	178			245	2140			1890
N/A												
N/A												
N/A												

CUMULATIVE VOLUME FIGURES

PERIOD	TR5	TR6	TR7	TR8
11:00-11:15	22			26
11:15-11:30	46			59
11:30-11:45	75			76
11:45-12:00	98			106
12:00-12:15	122			129
12:15-12:30	151			151
12:30-12:45	177			174
12:45-1:00	201			191
1:00-1:15	224			227
1:15-1:30	251			240
N/A				
N/A				
N/A				

ACTUAL TIME PERIOD VOLUME FIGURE

PERIOD	R1	S1	L1	TRR1	TRS1	TRL1	R2	S2	L2	TRR2	TRS2	TRL2
11:00-11:15	168			162	11			21	183			179
11:15-11:30	193	0	0	186	20	0	0	19	215	0	0	179
11:30-11:45	184	0	0	177	20	0	0	25	234	0	0	153
11:45-12:00	182	0	0	191	20	0	0	28	233	0	0	217
12:00-12:15	164	0	0	167	12	0	0	31	227	0	0	178
12:15-12:30	200	0	0	243	18	0	0	24	202	0	0	176
12:30-12:45	178	0	0	231	19	0	0	26	215	0	0	198
12:45-1:00	154	0	0	211	23	0	0	20	208	0	0	205
1:00-1:15	204	0	0	229	19	0	0	30	226	0	0	206
1:15-1:30	143	0	0	205	16	0	0	21	197	0	0	199
N/A												
N/A												
N/A												
TOTAL	1770	0	0	2002	178	0	0	245	2140	0	0	1890

LOCATION NUMBER = I-32A
STREET NAME APPROACH #1= RTE 128 NB
STREET NAME APPROACH #2=
STREET NAME APPROACH #3= RTE 128 SB
STREET NAME APPROACH #4= RTE 3

COMMUNITY = BURLINGTON
DATE COUNTED = 6/19/90
E' = 7/10/90
E' =
E' =
E' =

ACTUAL TIME PERIOD VOLUME FIGURE

PERIOD	R3	S3	L3	TRR3	TRS3	TRL3	R4	S4	L4	TRR4	TRS4	TRL4
11:00-11:15	22			26								
11:15-11:30	24	0	0	33	0	0	0	0	0	0	0	0
11:30-11:45	29	0	0	17	0	0	0	0	0	0	0	0
11:45-12:00	23	0	0	30	0	0	0	0	0	0	0	0
12:00-12:15	24	0	0	23	0	0	0	0	0	0	0	0
12:15-12:30	29	0	0	22	0	0	0	0	0	0	0	0
12:30-12:45	26	0	0	23	0	0	0	0	0	0	0	0
12:45-1:00	24	0	0	17	0	0	0	0	0	0	0	0
1:00-1:15	23	0	0	36	0	0	0	0	0	0	0	0
1:15-1:30	27	0	0	13	0	0	0	0	0	0	0	0
N/A												
N/A												
N/A												
TOTAL	251	0	0	240	0	0	0	0	0	0	0	0

ACTUAL TIME PERIOD VOLUME FIGURE

PERIOD	ENTER 1	EXIT	ENTER 2	EXIT	ENTER 3	EXIT	ENTER 4	EXIT
11:00-11:15	341	0	383	48	48	373	0	351
11:15-11:30	399	0	413	57	57	414	0	398
11:30-11:45	381	0	412	46	46	407	0	386
11:45-12:00	393	0	478	53	53	470	0	401
12:00-12:15	343	0	436	47	47	417	0	362
12:15-12:30	461	0	402	51	51	396	0	467
12:30-12:45	428	0	439	49	49	432	0	435
12:45-1:00	388	0	433	41	41	436	0	385
1:00-1:15	452	0	462	59	59	451	0	463
1:15-1:30	364	0	417	40	40	412	0	369
N/A	0	0	0	0	0	0	0	0
N/A	0	0	0	0	0	0	0	0
N/A	0	0	0	0	0	0	0	0
TOTAL	3950	0	4275	491	491	4208	0	4017

	APPROACH 1				APPROACH 2			
PERIOD	VOL	PHF	VOL T	% TKS	VOL	PHF	VOL T	% TKS
11:00-12:00	1514	0.95	787	51.98	1686	0.88	728	43.18
11:15-12:15	1516	0.95	793	52.31	1739	0.91	727	41.81
11:30-12:30	1578	0.86	848	53.74	1728	0.90	724	41.90
11:45-12:45	1625	0.88	901	55.45	1755	0.92	769	43.82
12:00-1:00	1620	0.88	924	57.04	1710	0.97	757	44.27
12:15-1:15	1729	0.94	993	57.43	1736	0.94	785	45.22
12:30-1:30	1632	0.90	953	58.39	1751	0.95	808	46.15
N/A								
N/A								
N/A								

32A

STREET NAME APPROACH #1= RTE 128 NB
STREET NAME APPROACH #2=
STREET NAME APPROACH #3= RTE 128 SB
STREET NAME APPROACH #4= RTE 3

COMMUNITY = BURLINGTON
DATE COUNTED = 6/19/90
E' = = 7/10/90
E' = =
E' = =
E' = =

PERIOD	APPROACH 3 VOL	PHF	VOL T	% TKS	APPROACH 4 VOL	PHF	VOL T	% TKS	INTERSECTION APP. /PEAK HOUR	PEAK HR.	VOLUME
11:00-12:00	204	0.89	106	51.96	0 ERR		0 ERR		3404	0.92	3665
11:15-12:15	203	0.89	103	50.74	0 ERR		0 ERR		3458	0.94	
11:30-12:30	197	0.93	92	46.70	0 ERR		0 ERR		3503	0.95	
11:45-12:45	200	0.94	98	49.00	0 ERR		0 ERR		3580	0.97	
12:00-1:00	188	0.92	85	45.21	0 ERR		0 ERR		3518	0.96	
12:15-1:15	200	0.85	98	49.00	0 ERR		0 ERR		3665	0.94	
12:30-1:30	189	0.80	89	47.09	0 ERR		0 ERR		3572	0.92	
N/A									0	0.00	
N/A									0	0.00	
N/A									0	0.00	

PERIOD	APPRO. 1 R	S	L	APPRO. 2 R	S	L	APPRO 3. R	S	L	APPRO. 4 R	S	L
11:00-12:00	1443	71	0	0	93	1593	204	0	0	0	0	0
11:15-12:15	1444	72	0	0	103	1636	203	0	0	0	0	0
11:30-12:30	1508	70	0	0	108	1620	197	0	0	0	0	0
11:45-12:45	1556	69	0	0	109	1646	200	0	0	0	0	0
12:00-1:00	1548	72	0	0	101	1609	188	0	0	0	0	0
12:15-1:15	1650	79	0	0	100	1636	200	0	0	0	0	0
12:30-1:30	1555	77	0	0	97	1654	189	0	0	0	0	0
N/A												
N/A												
N/A												
TOTAL	3772	178	0	0	245	4030	491	0	0	0	0	0

PERIOD	EXIT	VOL.ENTER APP 1	EXIT	VOL.ENTER APP 2	EXIT	VOL.ENTER APP 3	EXIT	VOL.ENTER APP 4
11:00-12:00	0	1514	204	1686	1664	204	1536	0
11:15-12:15	0	1516	203	1739	1708	203	1547	0
11:30-12:30	0	1578	197	1728	1690	197	1616	0
11:45-12:45	0	1625	200	1755	1715	200	1665	0
12:00-1:00	0	1620	188	1710	1681	188	1649	0
12:15-1:15	0	1729	200	1736	1715	200	1750	0
12:30-1:30	0	1632	189	1751	1731	189	1652	0
TOTAL	0	3950	491	4275	4208	491	4017	0

LOCATION NUMBER = I-32A
STREET NAME APPROACH #1= RTE 128 NB
STREET NAME APPROACH #2=
STREET NAME APPROACH #3= RTE 128 SB
STREET NAME APPROACH #4= RTE 3

COMMUNITY = BURLINGTON
DATE COUNTED = 6/19/90
E' = = 7/10/90
E' = =
E' = =
E' = =

CUMULATIVE VOLUME FIGURES

PERIOD	1	2	3	4	TR1	TR2	TR3	TR4	5	6	7	8
2:30-2:45	0			0	0			0	0			0
2:45-3:00	0			0	0			0	0			0
3:00-3:15	224			297	21			24	199			290
3:15-3:30	449			609	41			51	434			626
3:30-3:45	785			979	52			73	707			1055
3:45-4:00	1075			1307	59			92	945			1531
4:00-4:15	1378			1651	70			104	1270			1948
4:15-4:30	1779			1988	97			124	1579			2438
4:30-4:45	2189			2301	111			142	1909			2833
4:45-5:00	2576			2616	119			152	2182			3252
5:00-5:15	2962			2955	125			166	2492			3659
5:15-5:30	3466			3257	129			182	2849			4092
5:30-5:45	3883			3593	131			201	3081			4494
5:45-6:00	4246			3927	137			215	3362			4911
6:00-6:15	4651			4324	142			227	3663			5321
6:15-6:30	4928			4630	147			241	3886			5694

CUMULATIVE VOLUME FIGURES

PERIOD	TR5	TR6	TR7	TR8
2:30-2:45	0			0
2:45-3:00	0			0
3:00-3:15	22			24
3:15-3:30	41			49
3:30-3:45	64			85
3:45-4:00	81			113
4:00-4:15	97			129
4:15-4:30	111			153
4:30-4:45	128			180
4:45-5:00	140			202
5:00-5:15	144			226
5:15-5:30	153			243
5:30-5:45	161			257
5:45-6:00	174			272
6:00-6:15	177			280
6:15-6:30	186			288

ACTUAL TIME PERIOD VOLUME FIGURE

PERIOD	R1	S1	L1	TRR1	TRS1	TRL1	R2	S2	L2	TRR2	TRS2	TRL2
2:30-2:45	0			0	0			0	0			0
2:45-3:00	0	0	0	0	0	0	0	0	0	0	0	0
3:00-3:15	224	0	0	297	21	0	0	24	199	0	0	290
3:15-3:30	225	0	0	312	20	0	0	27	235	0	0	336
3:30-3:45	336	0	0	370	11	0	0	22	273	0	0	429
3:45-4:00	290	0	0	328	7	0	0	19	238	0	0	476
4:00-4:15	303	0	0	344	11	0	0	12	325	0	0	417
4:15-4:30	401	0	0	337	27	0	0	20	309	0	0	490
4:30-4:45	410	0	0	313	14	0	0	18	330	0	0	395
4:45-5:00	387	0	0	315	8	0	0	10	273	0	0	419
5:00-5:15	386	0	0	339	6	0	0	14	310	0	0	407
5:15-5:30	504	0	0	302	4	0	0	16	357	0	0	433
5:30-5:45	417	0	0	336	2	0	0	19	232	0	0	402
5:45-6:00	363	0	0	334	6	0	0	14	281	0	0	417
6:00-6:15	405	0	0	397	5	0	0	12	301	0	0	410
6:15-6:30	277	0	0	306	5	0	0	14	223	0	0	373
TOTAL	4928	0	0	4630	147	0	0	241	3886	0	0	5694

LOCATION NUMBER = I-32A
STREET NAME APPROACH #1= RTE 128 NB
STREET NAME APPROACH #2=
STREET NAME APPROACH #3= RTE 128 SB
STREET NAME APPROACH #4= RTE 3

COMMUNITY = BURLINGTON
DATE COUNTED = 6/19/90
E' = = 7/10/90
E' = =
E' = =
E' = =

ACTUAL TIME PERIOD VOLUME FIGURE

PERIOD	R3	S3	L3	TRR3	TRS3	TRL3	R4	S4	L4	TRR4	TRS4	TRL4
2:30-2:45	0			0								
2:45-3:00	0	0	0	0	0	0	0	0	0	0	0	0
3:00-3:15	22	0	0	24	0	0	0	0	0	0	0	0
3:15-3:30	19	0	0	25	0	0	0	0	0	0	0	0
3:30-3:45	23	0	0	36	0	0	0	0	0	0	0	0
3:45-4:00	17	0	0	28	0	0	0	0	0	0	0	0
4:00-4:15	16	0	0	16	0	0	0	0	0	0	0	0
4:15-4:30	14	0	0	24	0	0	0	0	0	0	0	0
4:30-4:45	17	0	0	27	0	0	0	0	0	0	0	0
4:45-5:00	12	0	0	22	0	0	0	0	0	0	0	0
5:00-5:15	4	0	0	24	0	0	0	0	0	0	0	0
5:15-5:30	9	0	0	17	0	0	0	0	0	0	0	0
5:30-5:45	8	0	0	14	0	0	0	0	0	0	0	0
5:45-6:00	13	0	0	15	0	0	0	0	0	0	0	0
6:00-6:15	3	0	0	8	0	0	0	0	0	0	0	0
6:15-6:30	9	0	0	8	0	0	0	0	0	0	0	0
TOTAL	186	0	0	288	0	0	0	0	0	0	0	0

ACTUAL TIME PERIOD VOLUME FIGURE

PERIOD	ENTER 1	EXIT	ENTER 2	EXIT	ENTER 3	EXIT	ENTER 4	EXIT
2:30-2:45	0	0	0	0	0	0	0	0
2:45-3:00	0	0	0	0	0	0	0	0
3:00-3:15	542	0	513	46	46	510	0	545
3:15-3:30	557	0	598	44	44	591	0	564
3:30-3:45	717	0	724	59	59	713	0	728
3:45-4:00	625	0	733	45	45	721	0	637
4:00-4:15	658	0	754	32	32	753	0	659
4:15-4:30	765	0	819	38	38	826	0	758
4:30-4:45	737	0	743	44	44	739	0	741
4:45-5:00	710	0	702	34	34	700	0	712
5:00-5:15	731	0	731	28	28	723	0	739
5:15-5:30	810	0	806	26	26	794	0	822
5:30-5:45	755	0	653	22	22	636	0	772
5:45-6:00	703	0	712	28	28	704	0	711
6:00-6:15	807	0	723	11	11	716	0	814
6:15-6:30	588	0	610	17	17	601	0	597
TOTAL	9705	0	9821	474	474	9727	0	9799

	APPROACH 1				APPROACH 2			
PERIOD	VOL	PHF	VOL T	% TKS	VOL	PHF	VOL T	% TKS
2:30-3:30	1099	0.49	650	59.14	1111	0.46	626	56.35
2:45-3:45	1816	0.63	1031	56.77	1835	0.63	1055	57.49
3:00-4:00	2441	0.85	1366	55.96	2568	0.88	1531	59.62
3:15-4:15	2557	0.89	1403	54.87	2809	0.93	1658	59.02
3:30-4:30	2765	0.90	1435	51.90	3030	0.92	1812	59.80
3:45-4:45	2785	0.91	1381	49.59	3049	0.93	1778	58.31
4:00-5:00	2870	0.94	1369	47.70	3018	0.92	1721	57.02
4:15-5:15	2943	0.96	1359	46.18	2995	0.91	1711	57.13
4:30-5:30	2988	0.92	1301	43.54	2982	0.92	1654	55.47
4:45-5:45	3006	0.93	1312	43.65	2892	0.90	1661	57.43
5:00-6:00	2999	0.93	1329	44.31	2902	0.90	1659	57.17
5:15-6:15	3075	0.95	1386	45.07	2894	0.90	1662	57.43
5:30-6:30	2853	0.88	1391	48.76	2698	0.93	1602	59.38

LOCATION NUMBER = I-32A
STREET NAME APPROACH #1= RTE 128 NB
STREET NAME APPROACH #2=
STREET NAME APPROACH #3= RTE 128 SB
STREET NAME APPROACH #4= RTE 3

COMMUNITY = BURLINGTON
DATE COUNTED = 6/19/90
E' = = 7/10/90
E' = =
E' = =
E' = =

	APPROACH 3				APPROACH 4				INTERSECTION APP. PEAK HR. VOLUME	
PERIOD	VOL	PHF	VOL T	% TKS	VOL	PHF	VOL T	% TKS	/PEAK HOUR	6102
2:30-3:30	90	0.49	49	54.44	0	ERR	0	ERR	2300	0.48
2:45-3:45	149	0.63	85	57.05	0	ERR	0	ERR	3800	0.63
3:00-4:00	194	0.82	113	58.25	0	ERR	0	ERR	5203	0.87
3:15-4:15	180	0.76	105	58.33	0	ERR	0	ERR	5546	0.92
3:30-4:30	174	0.74	104	59.77	0	ERR	0	ERR	5969	0.92
3:45-4:45	159	0.88	95	59.75	0	ERR	0	ERR	5993	0.92
4:00-5:00	148	0.84	89	60.14	0	ERR	0	ERR	6036	0.93
4:15-5:15	144	0.82	97	67.36	0	ERR	0	ERR	6082	0.94
4:30-5:30	132	0.75	90	68.18	0	ERR	0	ERR	6102	0.93
4:45-5:45	110	0.81	77	70.00	0	ERR	0	ERR	6008	0.91
5:00-6:00	104	0.93	70	67.31	0	ERR	0	ERR	6005	0.91
5:15-6:15	87	0.78	54	62.07	0	ERR	0	ERR	6056	0.92
5:30-6:30	78	0.70	45	57.69	0	ERR	0	ERR	5629	0.91

	APPRO. 1			APPRO. 2			APPRO 3.			APPRO. 4		
PERIOD	R	S	L	R	S	L	R	S	L	R	S	L
2:30-3:30	1058	41	0	0	51	1060	90	0	0	0	0	0
2:45-3:45	1764	52	0	0	73	1762	149	0	0	0	0	0
3:00-4:00	2382	59	0	0	92	2476	194	0	0	0	0	0
3:15-4:15	2508	49	0	0	80	2729	180	0	0	0	0	0
3:30-4:30	2709	56	0	0	73	2957	174	0	0	0	0	0
3:45-4:45	2726	59	0	0	69	2980	159	0	0	0	0	0
4:00-5:00	2810	60	0	0	60	2958	148	0	0	0	0	0
4:15-5:15	2888	55	0	0	62	2933	144	0	0	0	0	0
4:30-5:30	2956	32	0	0	58	2924	132	0	0	0	0	0
4:45-5:45	2986	20	0	0	59	2833	110	0	0	0	0	0
5:00-6:00	2981	18	0	0	63	2839	104	0	0	0	0	0
5:15-6:15	3058	17	0	0	61	2833	87	0	0	0	0	0
5:30-6:30	2835	18	0	0	59	2639	78	0	0	0	0	0
TOTAL	9558	147	0	0	241	9580	474	0	0	0	0	0

	EXIT	VOL.ENTER APP 1	EXIT	VOL.ENTER APP 2	EXIT	VOL.ENTER APP 3	EXIT	VOL.ENTER APP 4
PERIOD								
2:30-3:30	0	1099	90	1111	1101	90	1109	0
2:45-3:45	0	1816	149	1835	1814	149	1837	0
3:00-4:00	0	2441	194	2568	2535	194	2474	0
3:15-4:15	0	2557	180	2809	2778	180	2588	0
3:30-4:30	0	2765	174	3030	3013	174	2782	0
3:45-4:45	0	2785	159	3049	3039	159	2795	0
4:00-5:00	0	2870	148	3018	3018	148	2870	0
4:15-5:15	0	2943	144	2995	2988	144	2950	0
4:30-5:30	0	2988	132	2982	2956	132	3014	0
4:45-5:45	0	3006	110	2892	2853	110	3045	0
5:00-6:00	0	2999	104	2902	2857	104	3044	0
5:15-6:15	0	3075	87	2894	2850	87	3119	0
5:30-6:30	0	2853	78	2698	2657	78	2894	0
TOTAL	0	9705	474	9821	9727	474	9799	0

APPENDIX C

Traffic Flow Maps

Acton--1990 and 1995 No-Build

Bedford--1990 and 1995 No-Build

Concord--1990 and 1995 No-Build

Lexington--1990 and 1995 No-Build

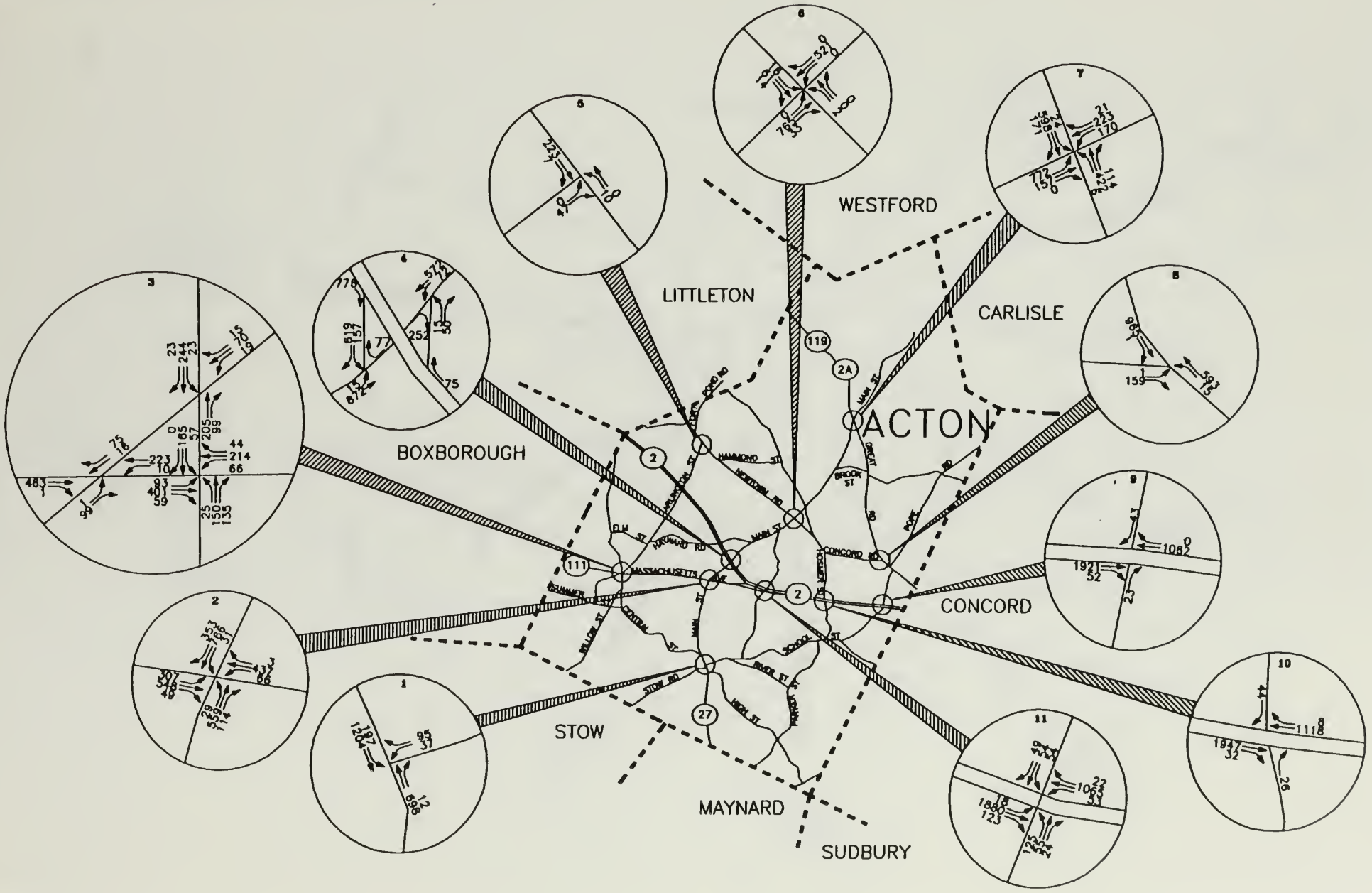
Lincoln--1990 and 1995 No-Build

Hanscom Air Force Base Area--1995 Build

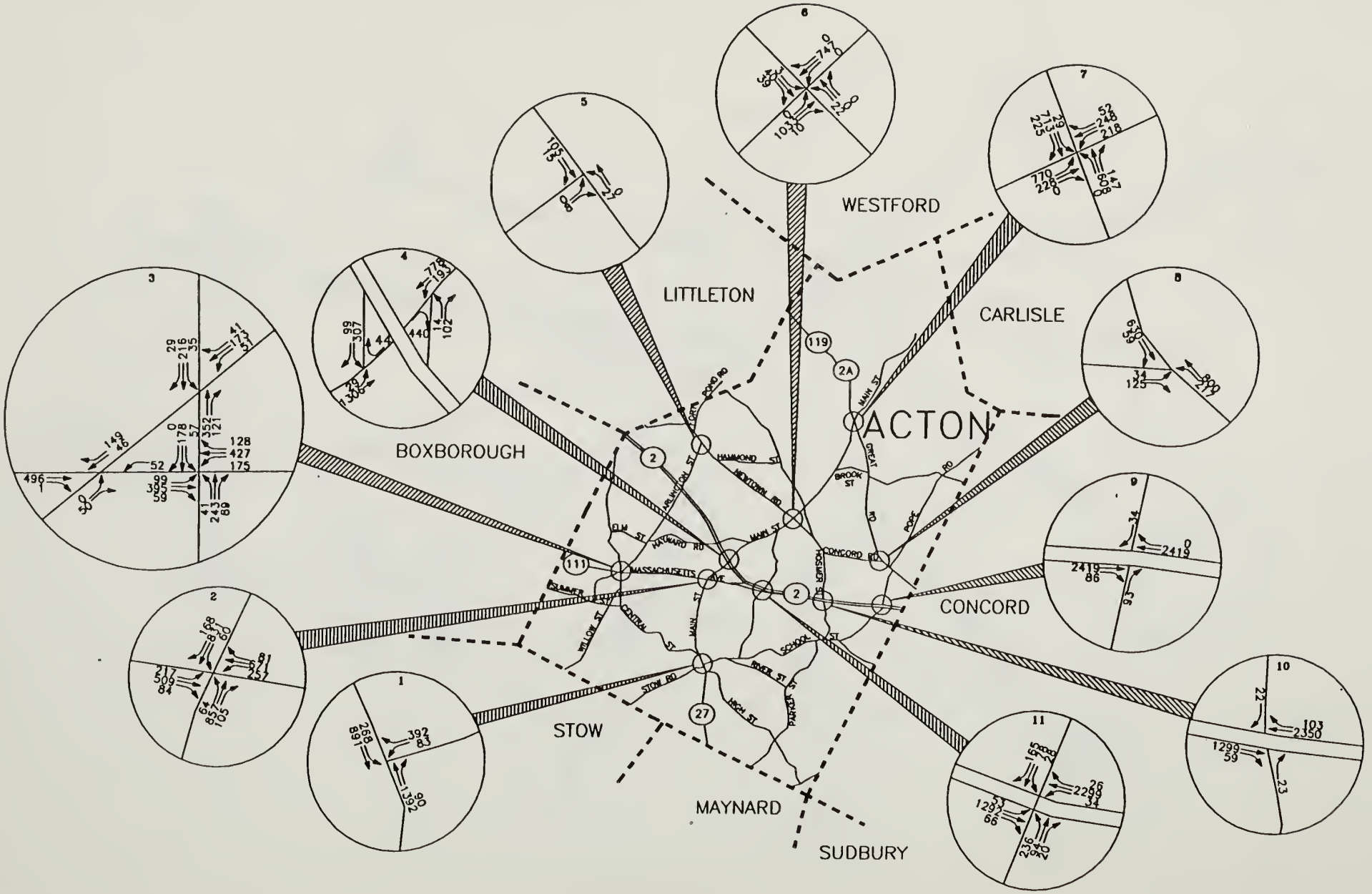
Acton Intersections - Key to Numbered Locations

1. Main Street (Route 27) @ School Street
2. Main Street (Route 27) @ Massachusetts Avenue (Route 111)
3. Massachusetts Avenue (Route 111) @ Arlington Street & Central Street
4. Route 2 @ Main Street (Route 27)
5. Newtown Road @ Arlington Street
6. Main Street (Route 27) @ Newtown Road & Concord Road
7. Main Street (Route 27) @ Great Road (Route 119/2A)
8. Great Road (Routes 119/2A) @ Concord Road
9. Route 2 @ Wetherbee Street/School Street
10. Route 2 @ Hosmer Street
11. Route 2 @ Piper Road & Taylor Road

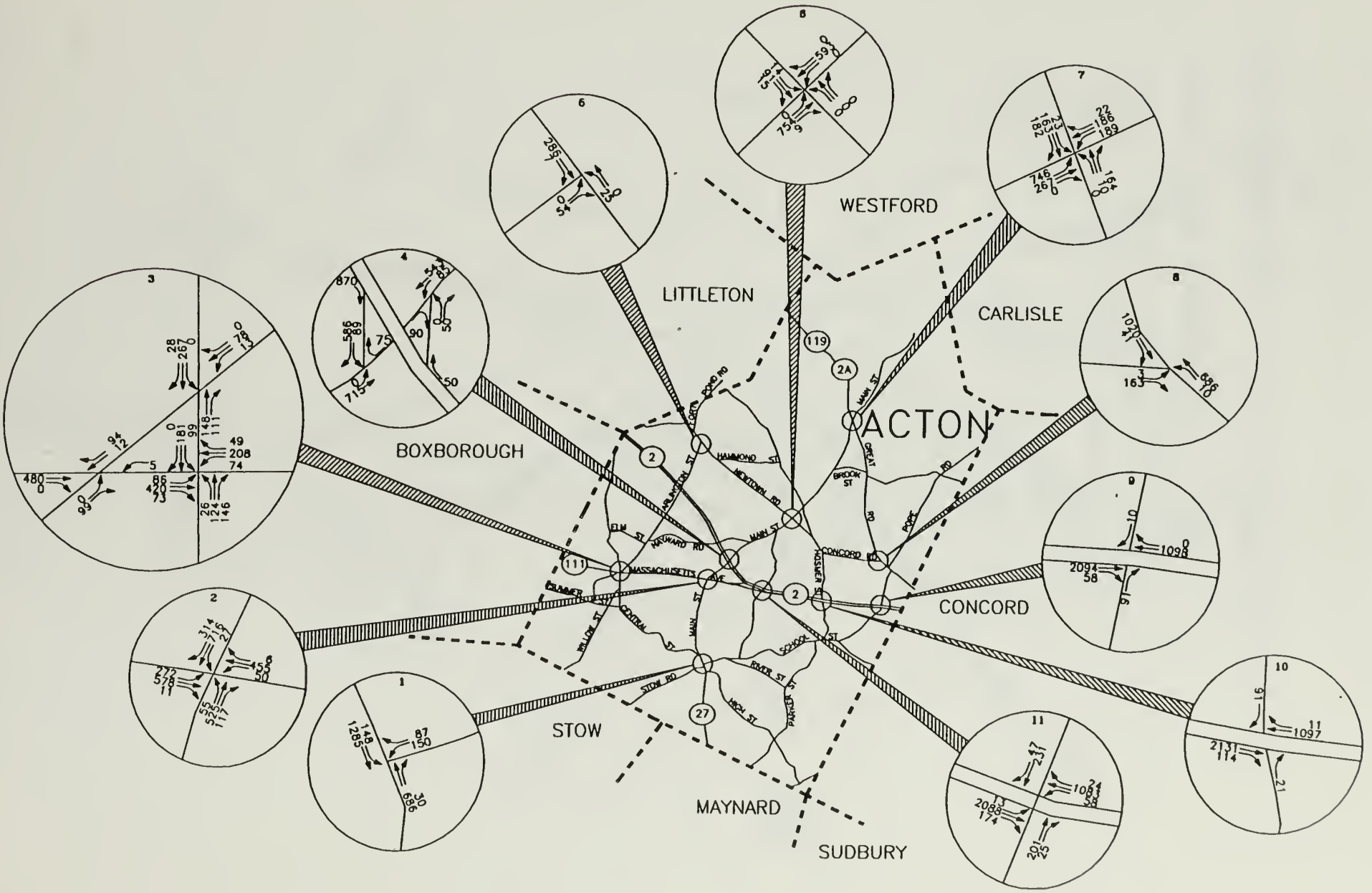
1990 AM Peak Hour Traffic Volumes - Acton



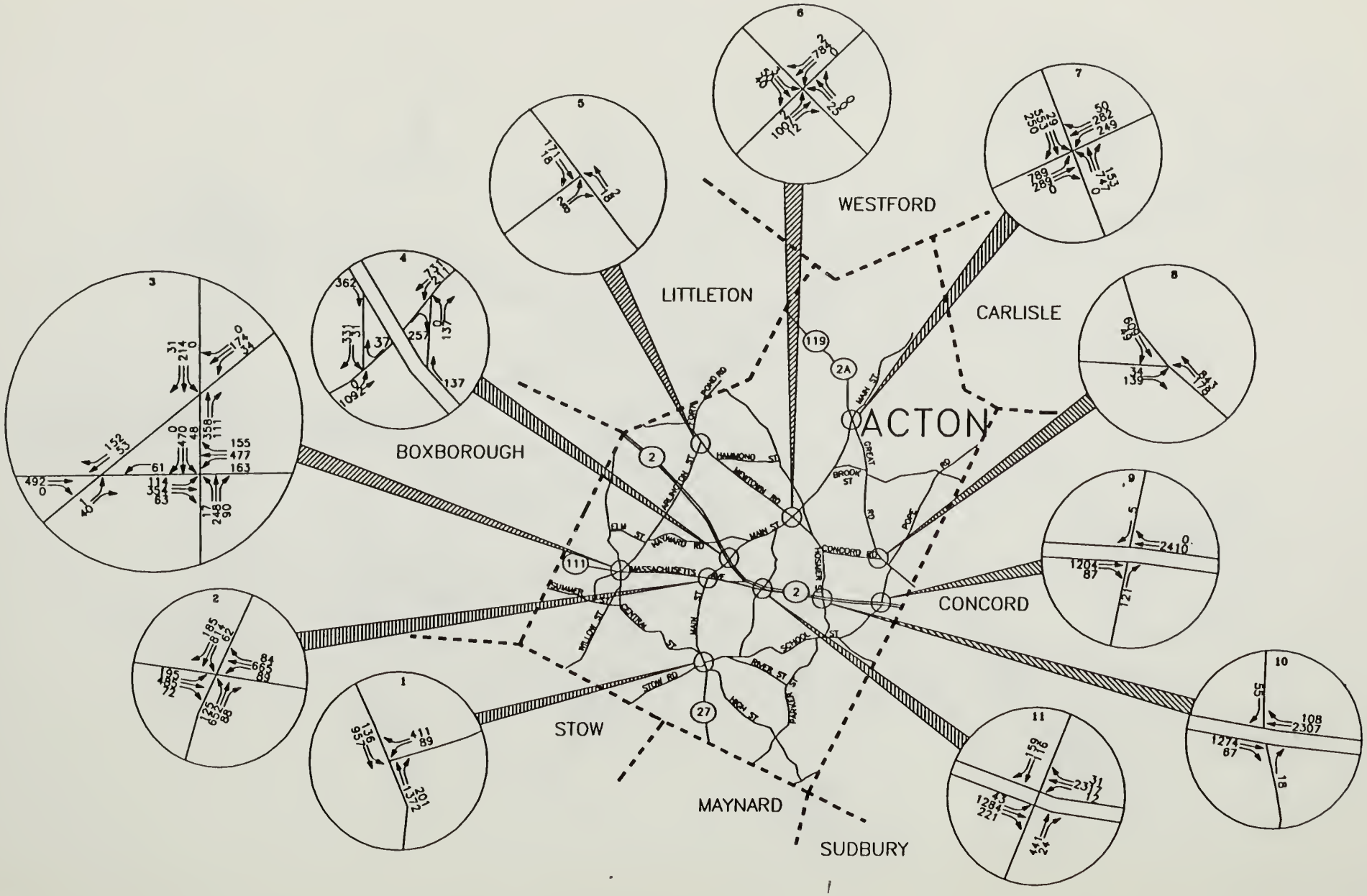
1990 PM Peak Hour Traffic Volumes - Acton



1995 AM Peak Hour No-Build Traffic Volumes - Acton



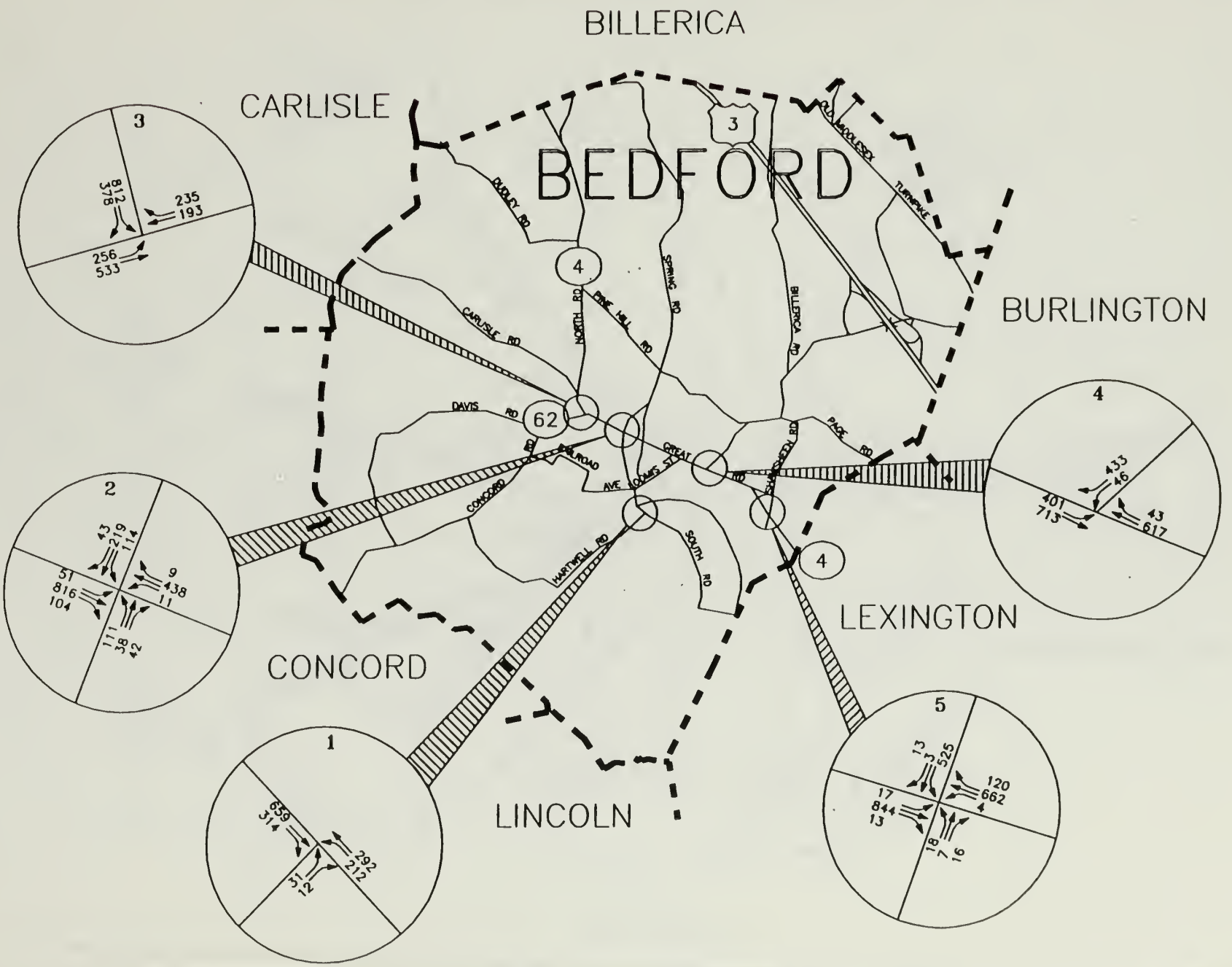
1995 PM Peak Hour No-Build Traffic Volumes - Acton



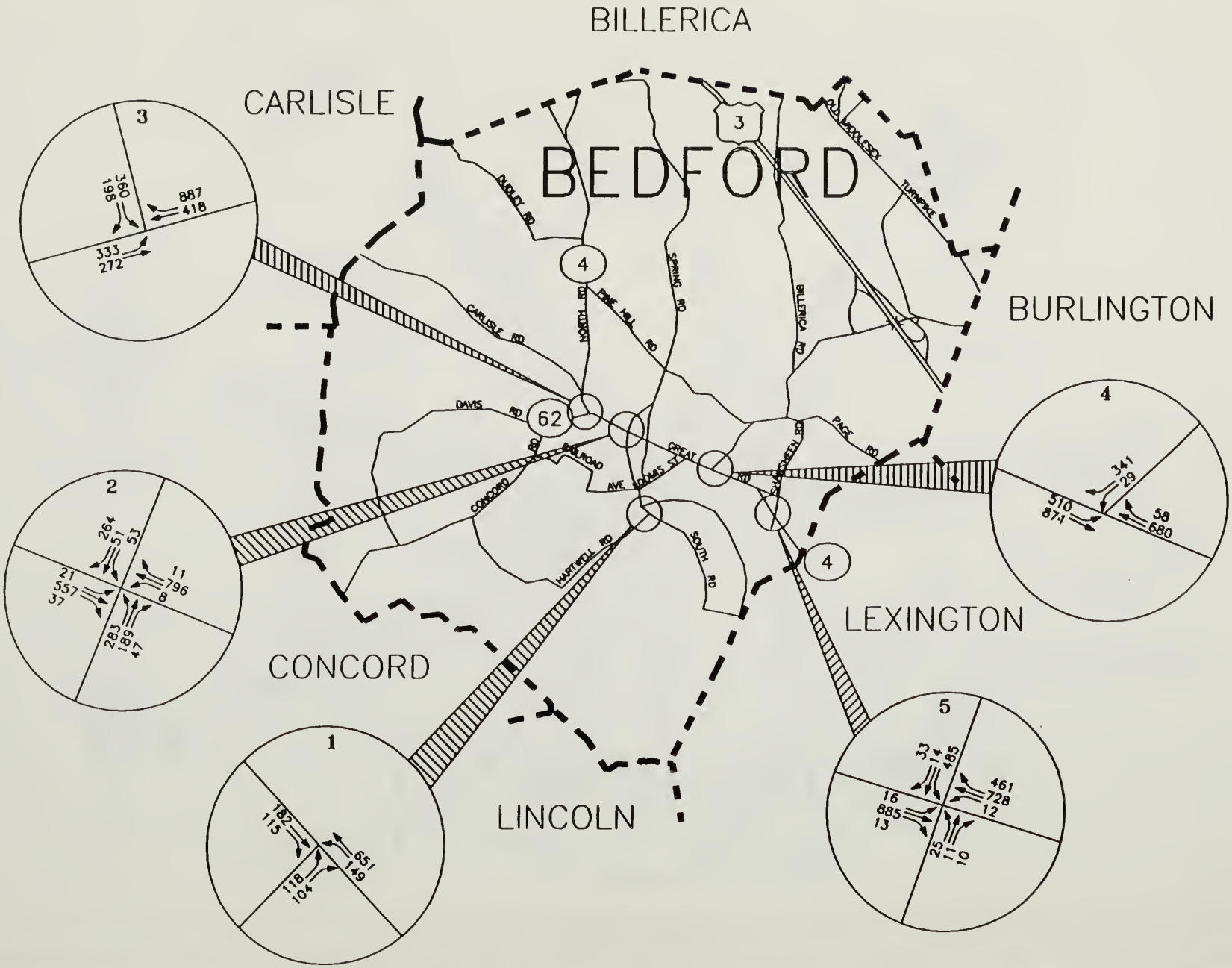
Bedford Intersections - Key to Numbered Locations

1. Hartwell Road @ South Road
2. Great Road (Rt. 4/225) @ South Road
3. Great Road (Rt. 4/225) @ North Road
4. Great Road (Rt. 4/225) @ Brooksbie (Rt. 62)
5. Great Road (Rt. 4/225) @ Shawsheen Road

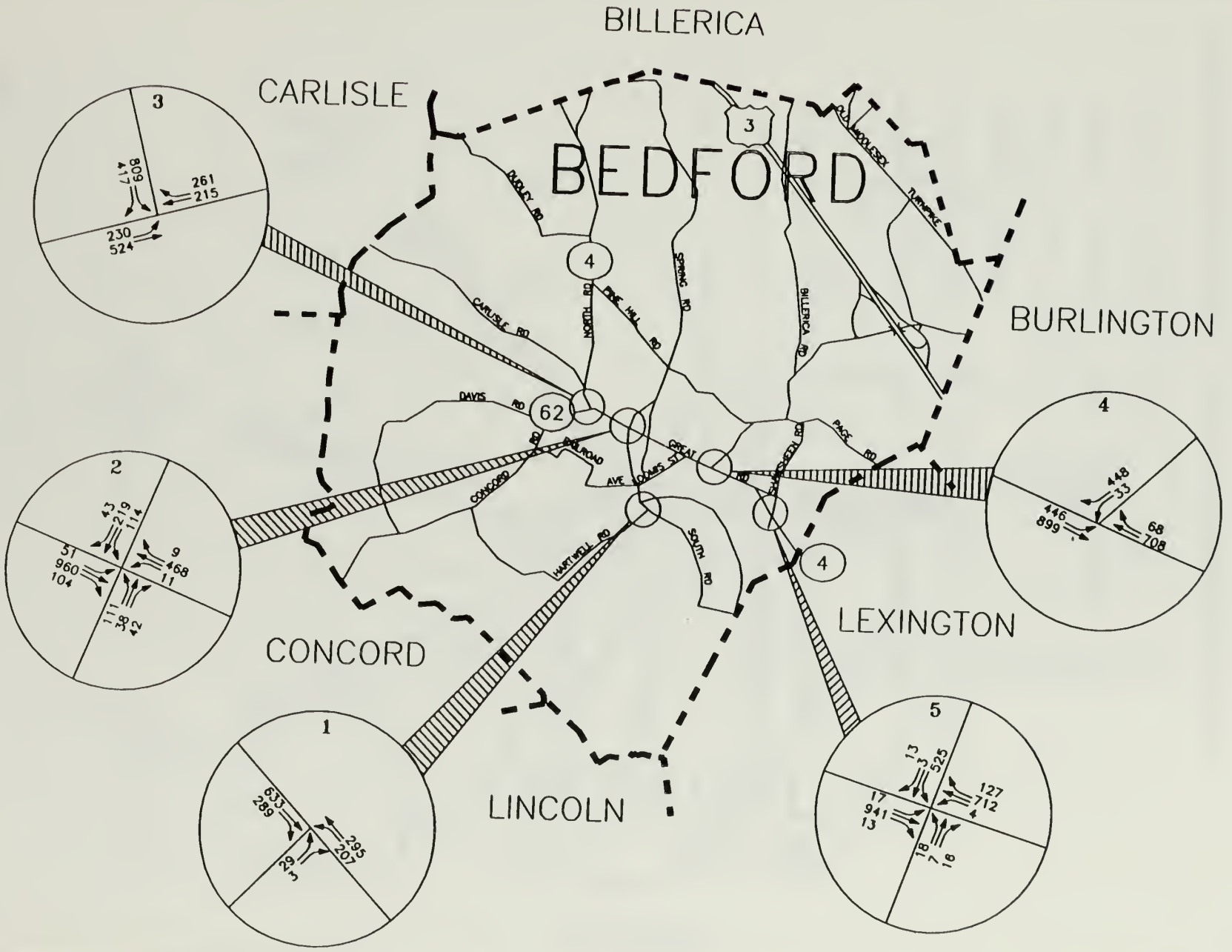
1990 AM Peak Hour Traffic Volumes - Bedford



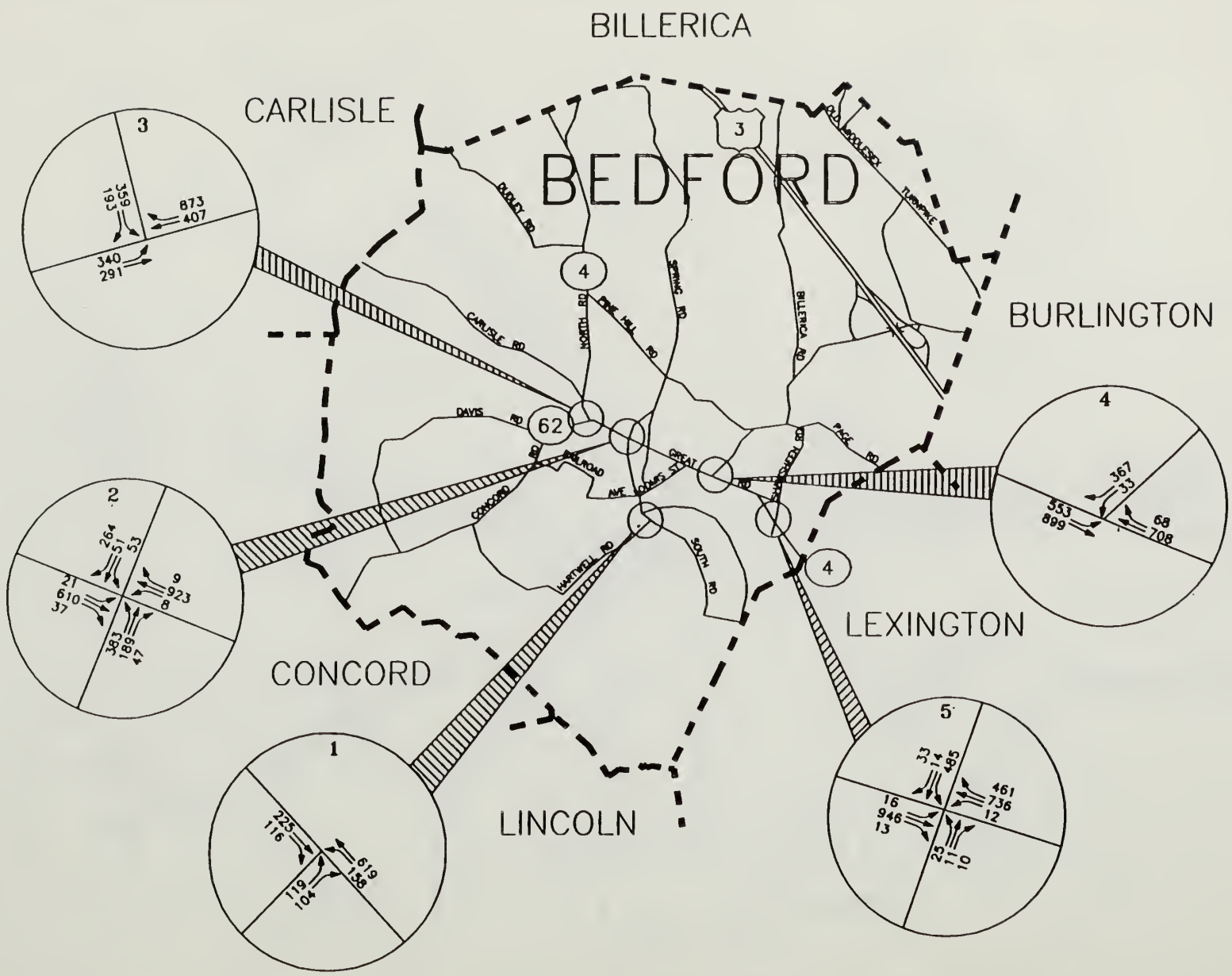
1990 PM Peak Hour Traffic Volumes - Bedford



1995 AM Peak Hour No-Build Traffic Volumes - Bedford



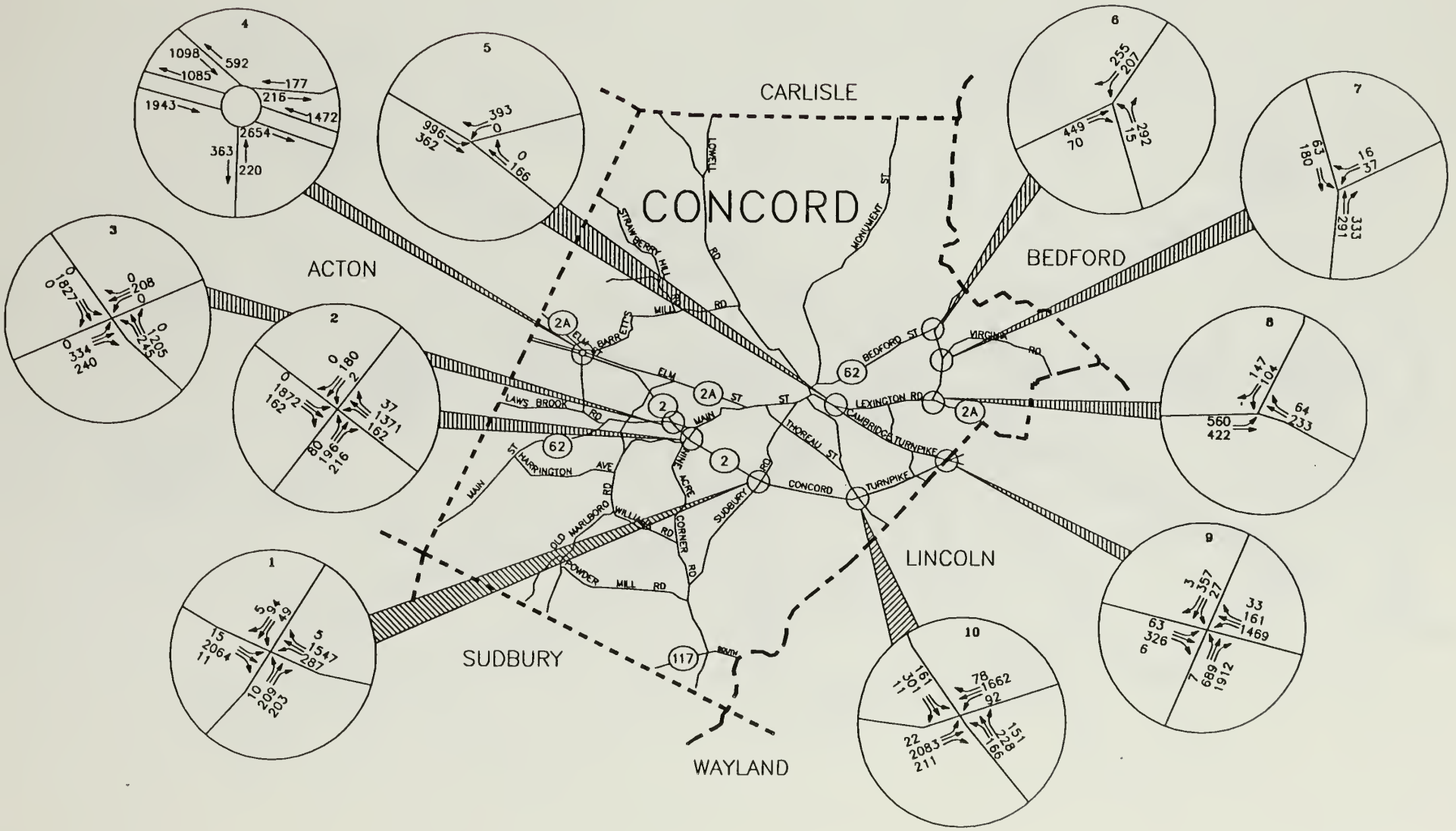
1995 PM Peak Hour No-Build Traffic Volumes - Bedford



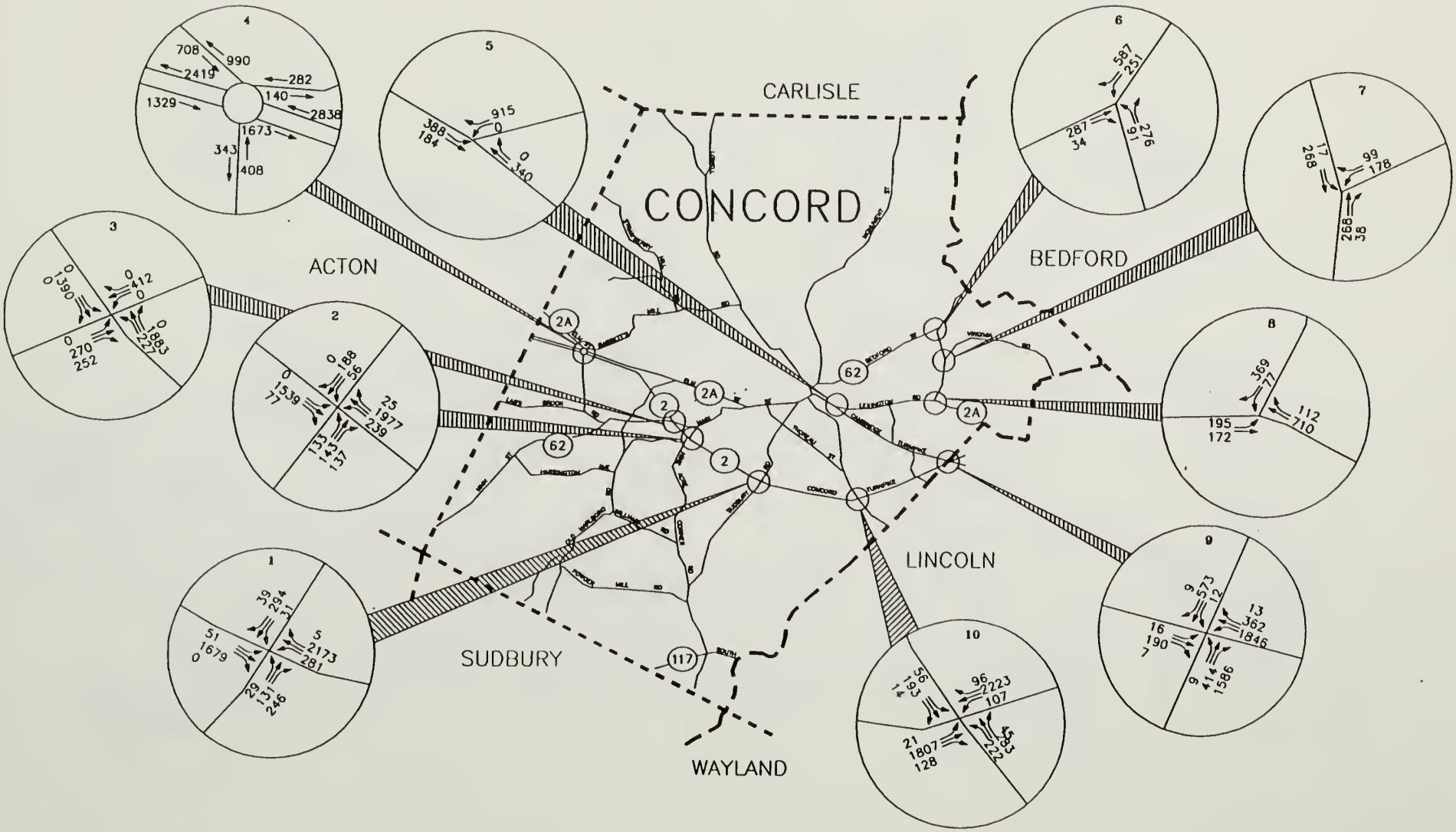
Concord Intersections - Key to Numbered Locations

1. Route 2 @ Sudbury Road
2. Route 2 @ Old Nine Acre Corner Road
3. Route 2 @ Main Street (Rt. 62)
4. Concord Rotary
5. Lexington Road (Route 2A) @ Cambridge Turnpike
6. Bedford Street (Rt. 62) @ Old Bedford Road
7. Old Bedford Road @ Virginia Road
8. Lexington Road (Route 2A) @ Old Bedford Road
9. Crosby's Corner (Route 2 @ Cambridge Turnpike)
10. Route 2 @ Route 126 & Thoreau Street

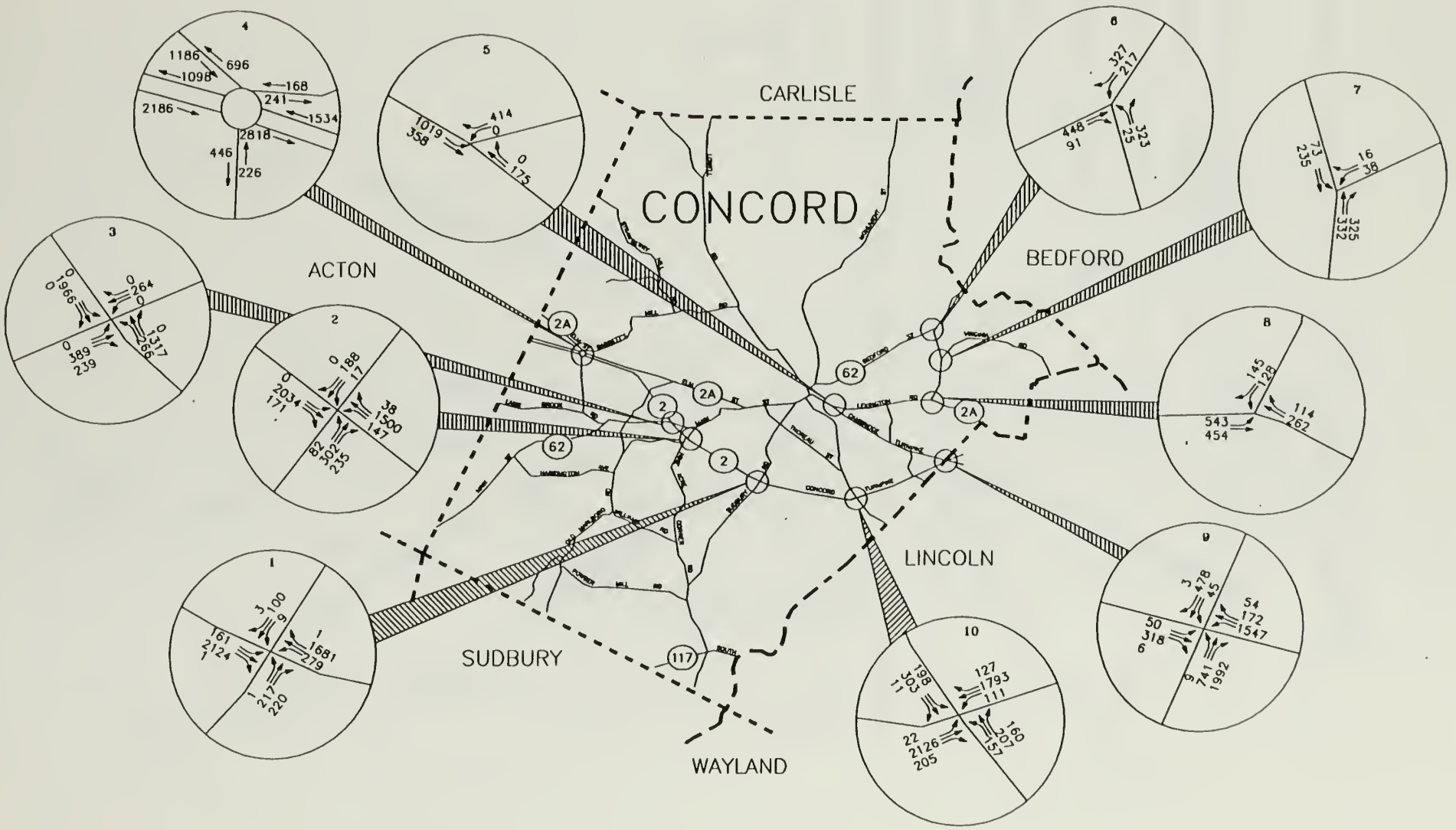
1990 AM Peak Hour Traffic Volumes - Concord



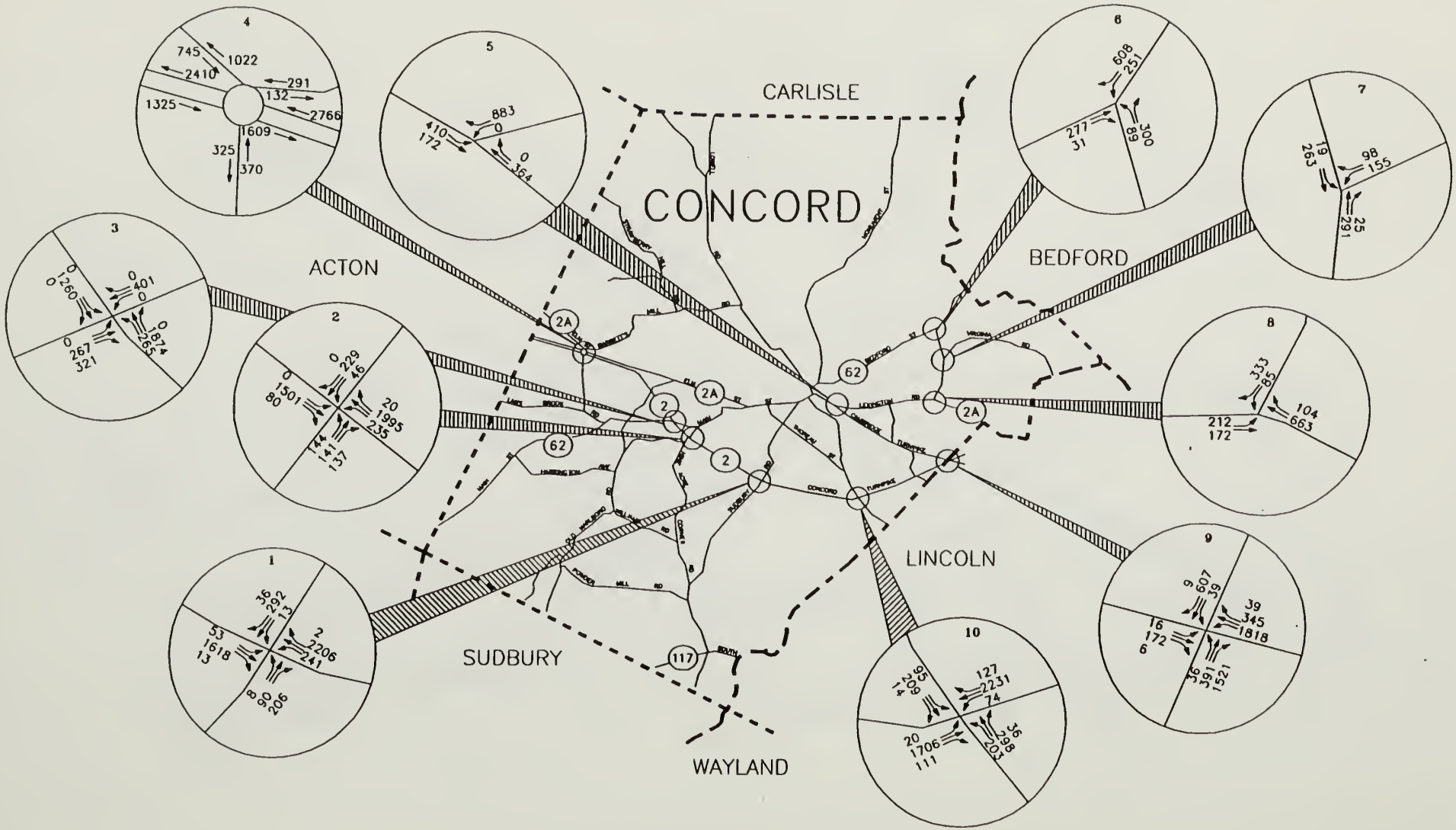
1990 PM Peak Hour Traffic Volumes - Concord



1995 AM Peak Hour No-Build Traffic Volumes - Concord



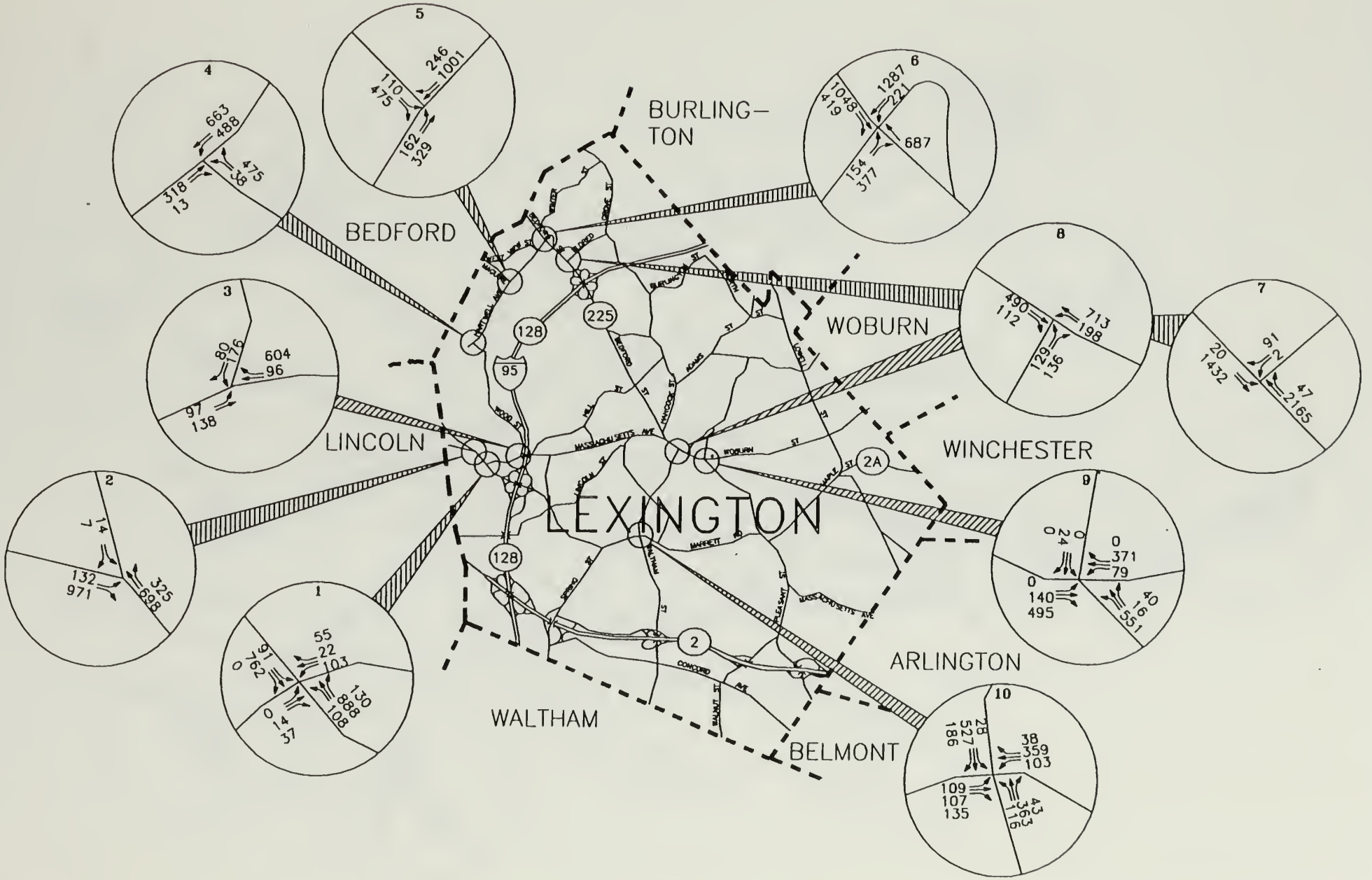
1995 PM Peak Hour No-Build Traffic Volumes - Concord



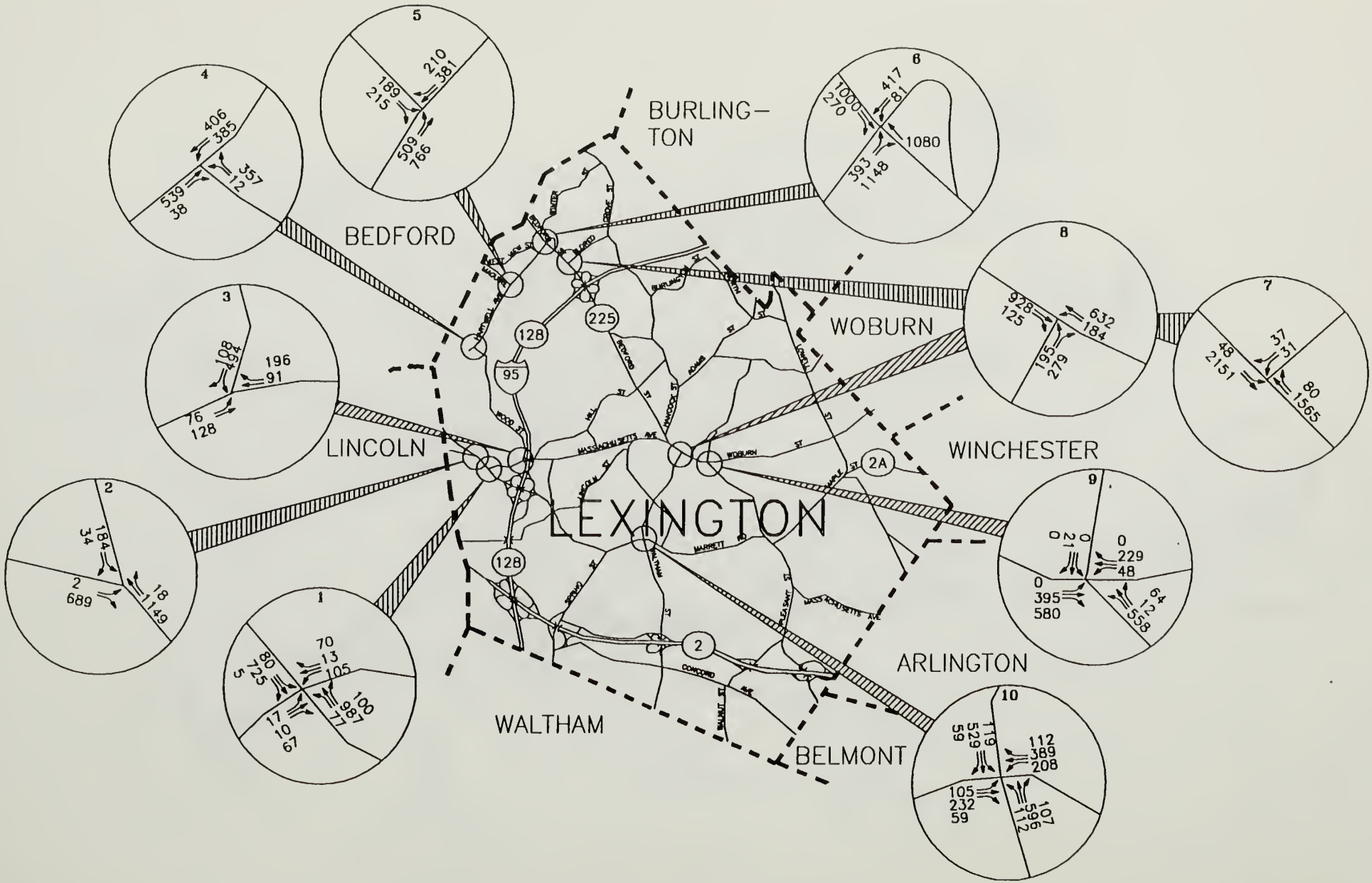
Lexington Intersections - Key to Number Locations

1. Massachusetts Avenue @ Marrett Road (Rt. 2A)
2. Route 2A @ Airport Road
3. Massachusetts Avenue @ Wood Street
4. Hartwell Avenue @ Wood Street
5. Hartwell Avenue @ Maguire Road
6. Great Road (Route 4/225) @ Hartwell Avenue
7. Great Road (Route 4/225) @ Eldred Street
8. Massachusetts Avenue (Route 4/225) @ Waltham Street
9. Massachusetts Avenue (Route 4/225) @ Woburn Street
10. Marrett Road (Rt. 2A) @ Waltham Street

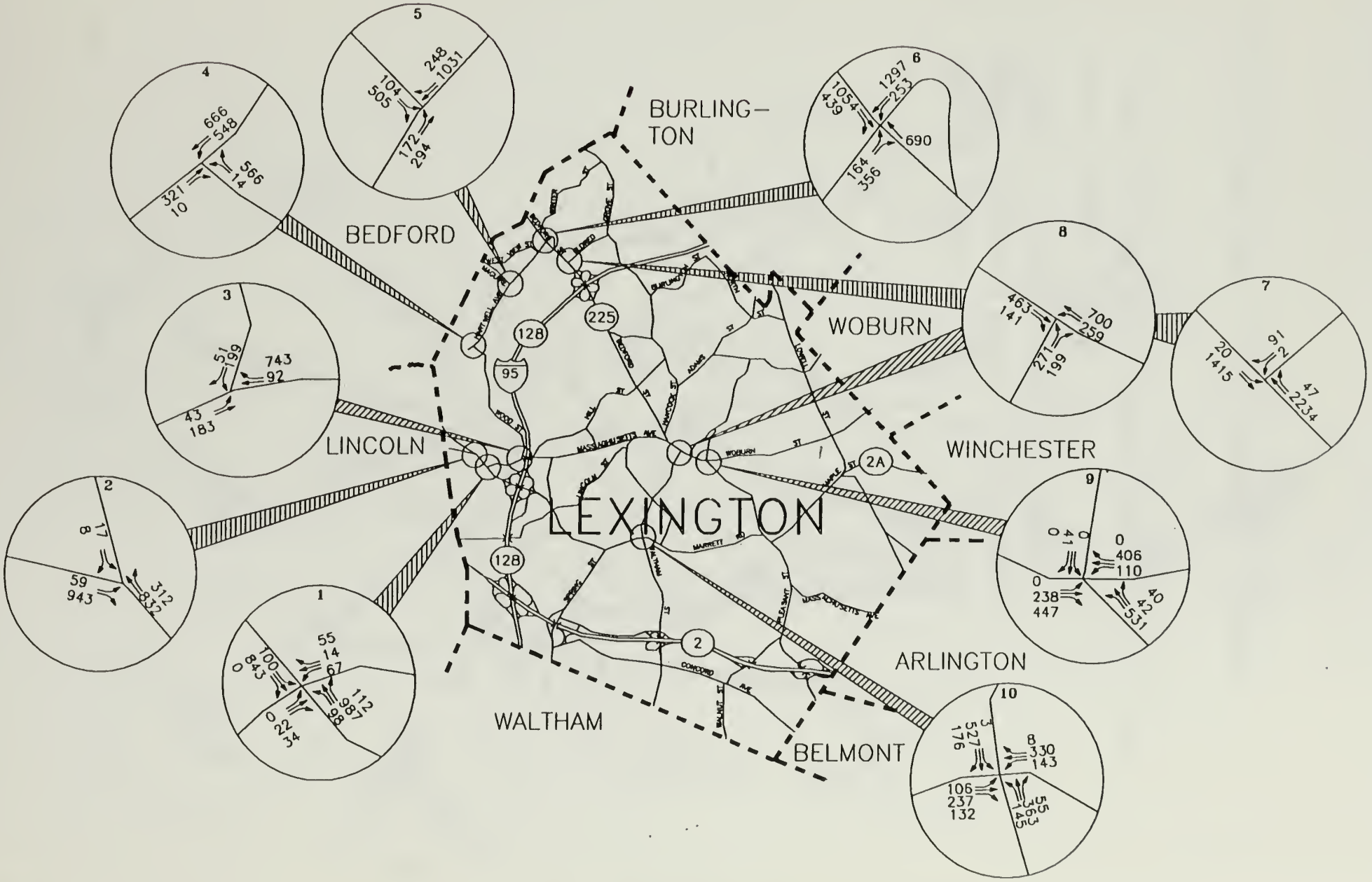
1990 AM Peak Hour Traffic Volumes - Lexington



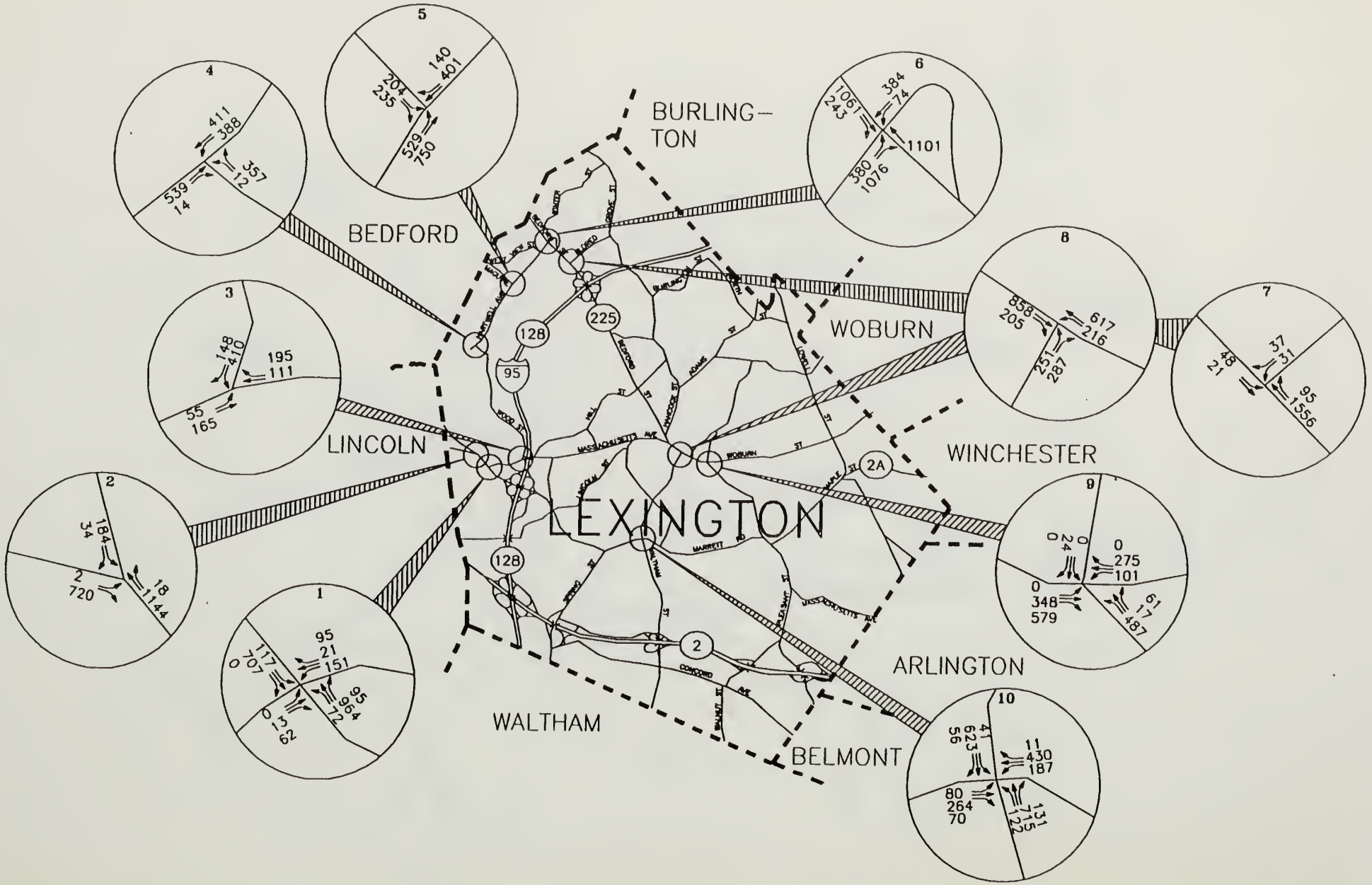
1990 PM Peak Hour Traffic Volumes - Lexington



1995 AM Peak Hour No-Build Traffic Volumes - Lexington



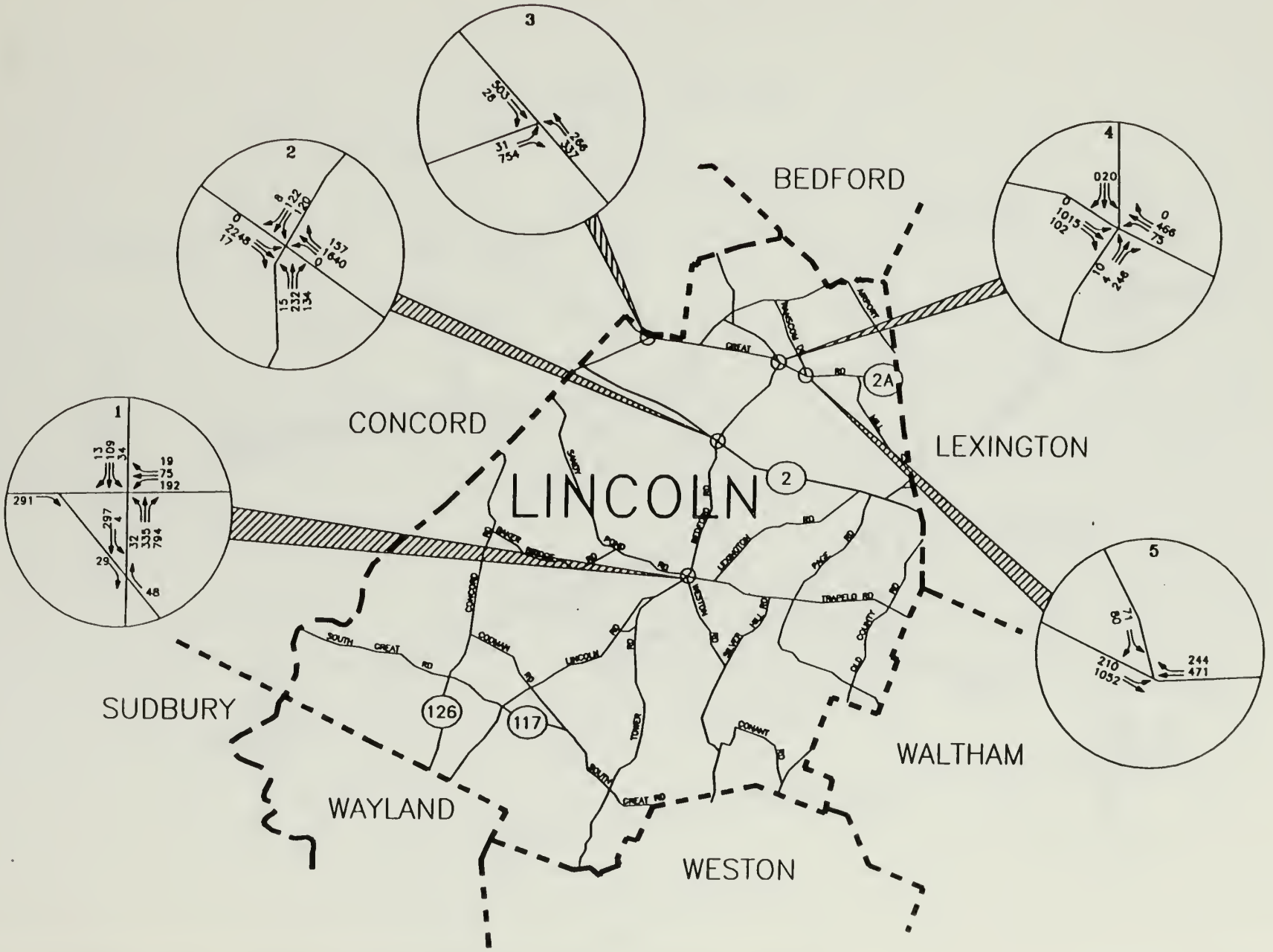
1995 PM Peak Hour No-Build Traffic Volumes - Lexington



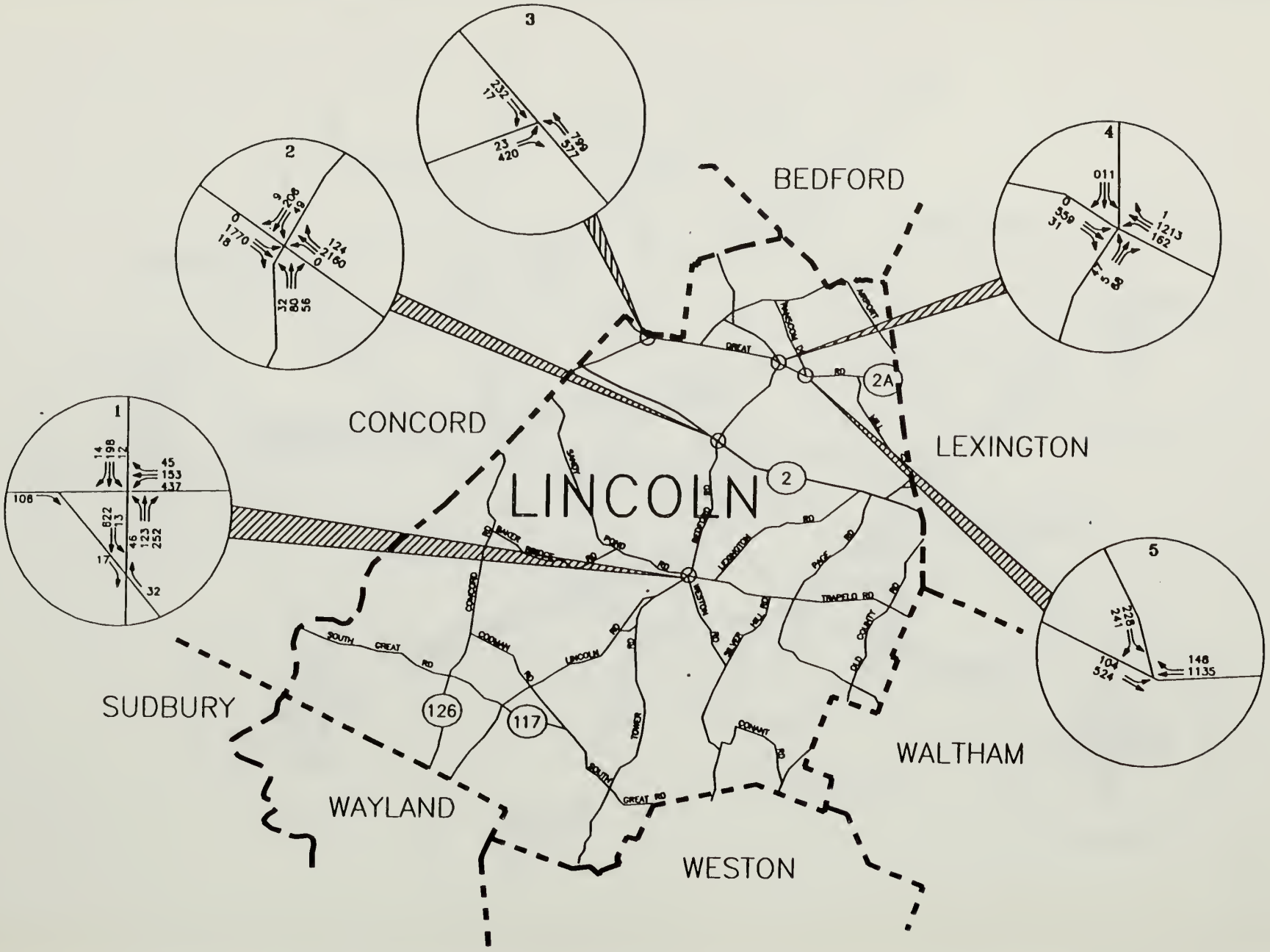
Lincoln Intersections - Key to Numbered Locations

1. Trapelo Road @ Bedford Road/Weston Road/Lincoln Road
2. Route 2 @ Bedford Road
3. Route 2A @ Cambridge Turnpike Cut-Off
4. Route 2A @ Bedford Road & Virginia Road
5. Route 2A @ Hanscom Drive

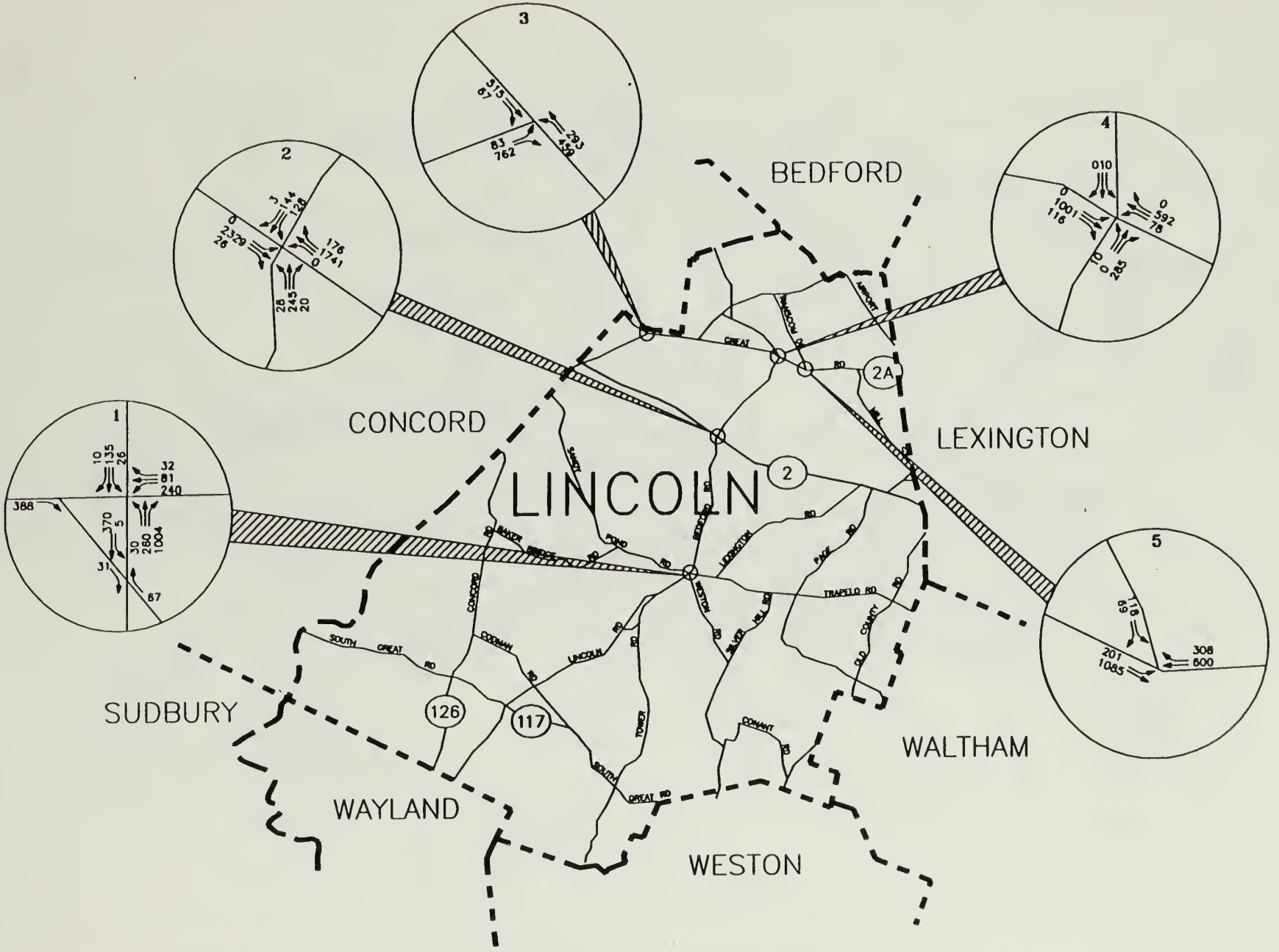
1990 AM Peak Hour Traffic Volumes - Lincoln



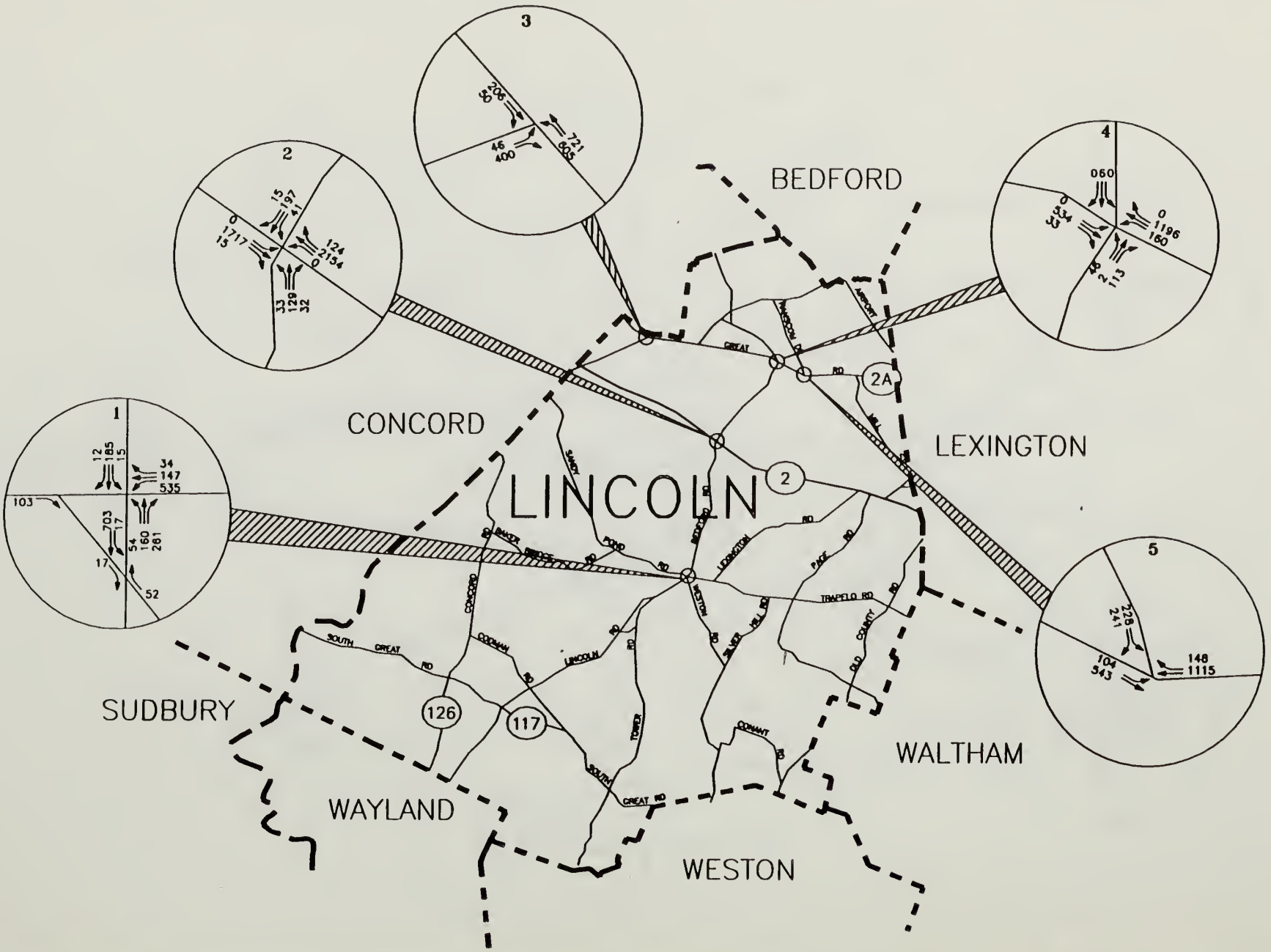
1990 PM Peak Hour Traffic Volumes - Lincoln



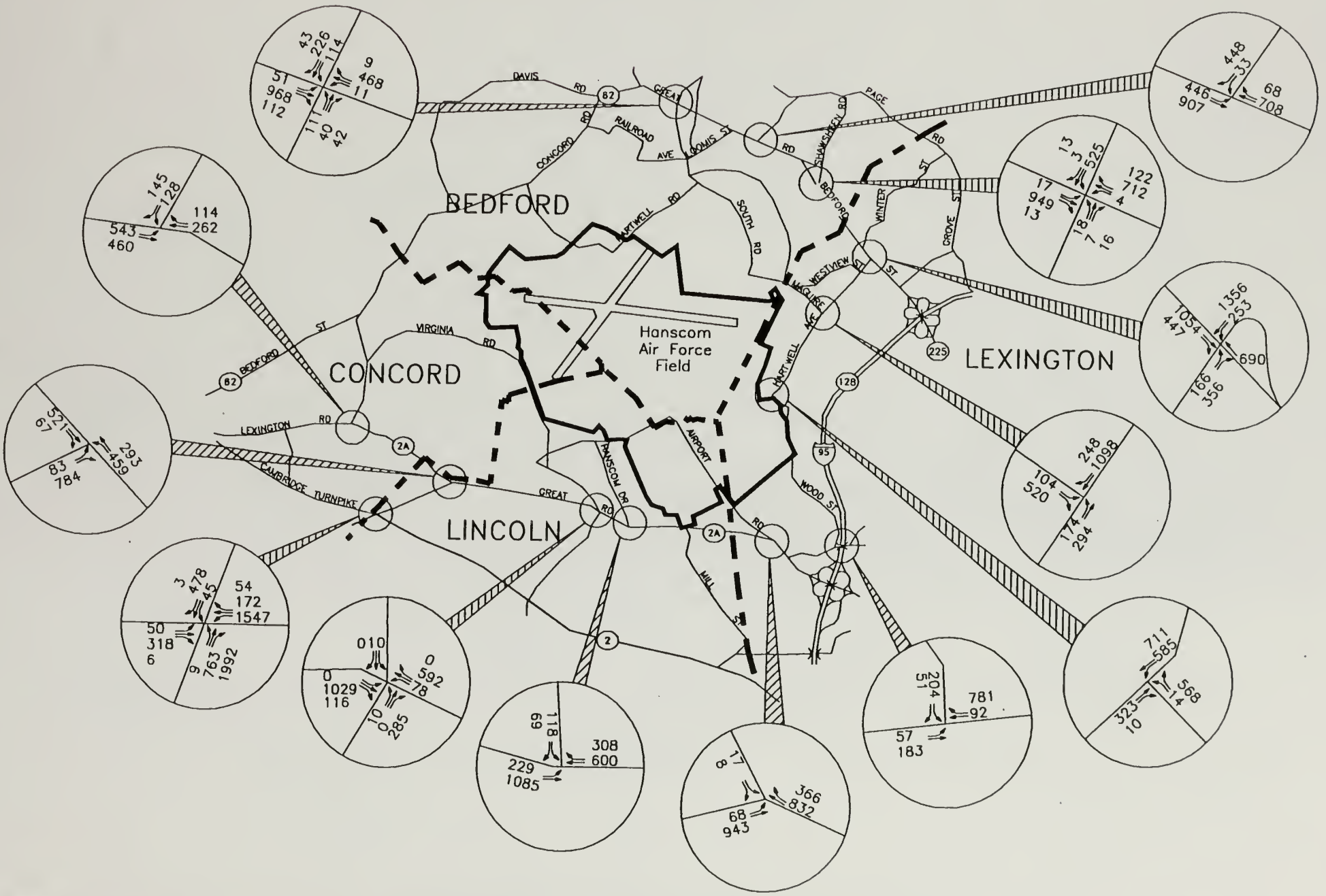
1995 AM Peak Hour No-Build Traffic Volumes - Lincoln



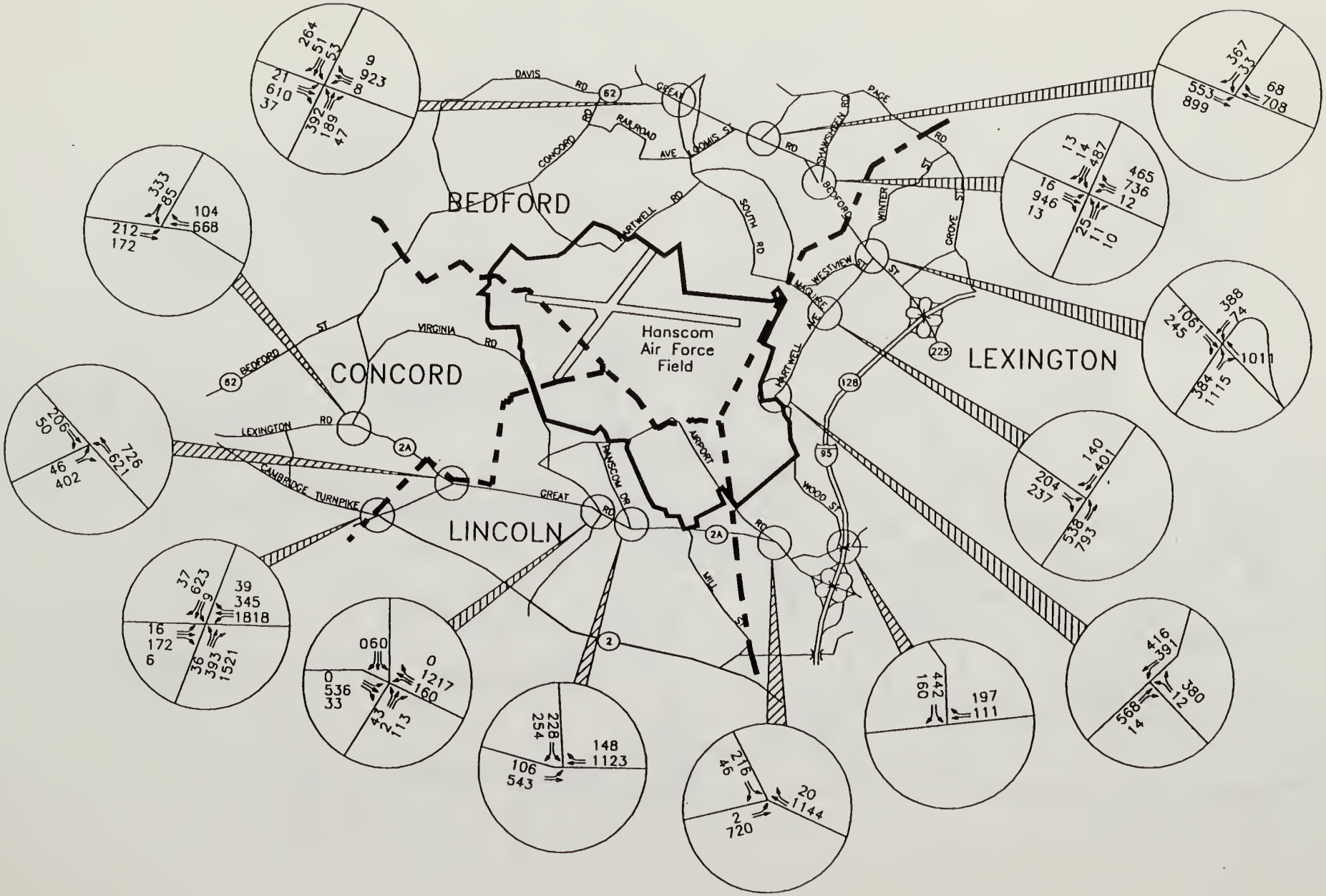
1995 PM Peak Hour No-Build Traffic Volumes - Lincoln



HAFB Area 1995 AM Peak Hour Build Traffic Volumes



HAFB Area 1995 PM Peak Hour Build Traffic Volumes



APPENDIX D

Intersection Level-of-Service Analyses

Rte. 4/225 (Bedford St.) @ Hartwell Ave.
Rte. 4/225 @ Shawsheen Rd./Pine St.
Rte. 4/225 (Great Rd.) @ South Rd./Hancock St.
Rte. 2A (Marrett Rd.) @ Massachusetts Ave.
Rte. 2A @ Bedford Rd./Virginia Rd.
Rte. 2A @ Hanscom Dr.
Rte. 2A @ Airport Rd.
Hartwell Ave. @ Wood St.
Hartwell Ave. @ Maguire Rd.
Rte. 4/225 (Bedford St.) @ Eldred St.
Rte. 4/225 (Great Rd.) @ Brooksbie Rd.

CINCH PROGRAM VERSION DATE 4-29-1988
1985 HCM - CHAPTER 9: SIGNALIZED - OPERATIONAL ANALYSIS
HARTWELL AVE/BEDFORD ST (4 &225)
AM Peak Hour
date:08-16-1991 time:18:24:54
LAST DATA SET NAMES LOADED OR SAVED
VOLUME=21am90 GEOMETRICS=21am90 SIGNAL=21am90
LOCATED IN CBD:N
VOLUME & GEOMETRICS

	VOLUMES			# OF LANES			LANE WIDTH			CROSS
DIR	LT	TH	RT	LT	TH	RT	LT	TH	RT	WALK
EB	0	1048	419	0	2	1	0.0	10.0	12.0	0
WB	0	687	0	0	2	0	0.0	10.0	0.0	0
NB	151	0	377	1	0	1	12.0	0.0	12.0	0
SB	221	1287	3	0	2	0	0.0	10.0	0.0	0

TRAFFIC & ROADWAY CONDITIONS

			ADJ PARK			PEDESTRIANS				ARR
DIR	GRADE	%HV	Y/N	MOVES	BUSES	PHF	CROSS	BUT	MIN TIME	TYPE
EB	-2.9%	3.5%	N	0	0	.920	0	N	7.0	3
WB	2.4%	5.6%	N	0	5	.910	0	N	7.0	3
NB	2.0%	6.7%	N	0	0	.890	0	N	7.0	3
SB	2.0%	1.1%	N	0	0	.960	0	N	7.0	3

PHASINGS

	EASTBOUND				WESTBOUND				NORTHBOUND				SOUTHBOUND				GREEN	Y+R	PRE/ACT
	l	t	r	p	l	t	r	p	l	t	r	p	l	t	r	p			
1			*								*						6.0	0	A
2			*								*		*	*	*		48.5	4	A
3		*	*			*	*										34.7	4	A

CYCLE= 97.2

VOLUME ADJUSTMENT WORKSHEET
PART 1 (MOVEMENT ADJUSTMENTS)

DIR	LTV	THV	RTV	PHF	LTFR	THFR	RTFR
EB	0	1048	419	.920	0	1139	455
WB	0	687	0	.910	0	755	0
NB	151	0	377	.890	170	0	424
SB	221	1287	3	.960	230	1341	3

PART 2 (LANE GROUP ADJUSTMENTS)

DIR	LN GROUP	FLOW	N	LU	v	Plt	Prt
EB	TH	1139	2	1.05	1196	0.00	0.00
EB	RT	455	1	1.00	455	0.00	1.00
WB	TH	755	2	1.05	793	0.00	0.00
NB	LT	170	1	1.00	170	1.00	0.00
NB	RT	424	1	1.00	424	0.00	1.00
SB	LT-TH-RT	1574	2	1.05	1653	0.15	0.00

PART 3 (OPPOSING VOLUME ADJUSTMENTS)

LEFT TURN	OPPOSING APPROACH									
BEING OPPOSED	VOLUMES			% OPPOSING LEFT TURN			# LANES			OPPOSING
	LT	TH	RT	LT	TH	RT	LT	TH	RT	VOLUME
NORTHBOUND	230	1341	3	100	100	100	0	2	0	1399
SOUTHBOUND	170	0	424	0	0	0	1	0	1	0

SATURATION FLOW ADJUSTMENT WORKSHEET

DIR	LN GROUP	IDEAL	N	Fwid	Fhv	Fgr	Fpark	Fbus	Farea	Frt	Flt	s
EB	TH	1800	2	0.933	0.983	1.015	1.000	1.000	1.000	1.000	1.000	3350
EB	RT	1800	1	1.000	0.983	1.015	1.000	1.000	1.000	0.850	1.000	1525
WB	TH	1800	2	0.933	0.973	0.988	1.000	0.990	1.000	1.000	1.000	3195
NB	LT	1800	1	1.000	0.968	0.990	1.000	1.000	1.000	1.000	0.950	1638
NB	RT	1800	1	1.000	0.968	0.990	1.000	1.000	1.000	0.850	1.000	1466
SB	LT-TH-RT	1800	2	0.933	0.995	0.990	1.000	1.000	1.000	1.000	1.000	3308

CAPACITY ANALYSIS WORKSHEET

DIR	LN GROUP	v	s	v/s	g/C	c	v/c	CRITICAL
EB	TH	1196	3350	0.36	0.36	1195	1.00	*
EB	RT	455	1525	0.30	0.96	1463	0.31	
WB	TH	793	3195	0.25	0.36	1140	0.70	
NB	LT	170	1638	0.06	0.06	172	0.99	*
NB	RT	424	1466	0.29	0.56	822	0.52	
SB	LT-TH-RT	1653	3308	0.50	0.50	1651	1.00	*

CYCLE= 97.2 LOST= 8.0 SUM V/S CRIT= 0.92 TOTAL V/C= 1.00
FOR THE NORTHBOUND PROTECTED/PERMISSIVE LEFT TURN LANE THE CAPACITY, V/S AND V/C RATIOS HAVE ALL BEEN ADJUSTED TO REFLECT A CAPACITY FOR
71 LEFT TURNS ON THE CHANGE INTERVAL AND 0 ON THE PERMISSIVE PHASE

LEVEL OF SERVICE WORKSHEET

DIR	LN GROUP	v/c	g/C	C	d1	c	d2	PF	Delay	LOS	Avg Q	95% Q
EB	TH	1.00	0.36	97.2	23.77	1195	20.19	0.85	37.37	D	21.7	36
EB	RT	0.31	0.96	97.2	0.09	1463	0.04	0.85	0.11	A	0.5	1
WB	TH	0.70	0.36	97.2	20.32	1140	1.31	0.85	18.38	C	13.1	13
NB	LT	0.99	0.56	97.2	15.93	172	48.65	1.00	64.58	F	5.2	10
NB	RT	0.52	0.56	97.2	10.02	822	0.47	0.85	8.91	B	5.0	5
SB	LT-TH-RT	1.00	0.50	97.2	18.51	1651	17.20	0.85	30.35	D	23.9	41

DIR	Delay	LOS
EB	27.09	D
WB	18.38	C
NB	24.83	C
SB	30.35	D

INTERSECTION DELAY = 26.48 INTERSECTION LOS=D

THE CYCLE LENGTH WITHIN THE BOUNDS OF 60 TO 120 SECONDS
WHICH MINIMIZES CRITICAL MOVEMENT DELAY IS 96.9 SECONDS

FOR A V/C RATIO OF .95 THE CYCLE SHOULD BE 233.9 SECONDS
for chosen cycle length 96.9
suggested timing phase 1 is 5.9 secs green, 0.0 secs yellow + red clear
suggested timing phase 2 is 48.4 secs green, 4.0 secs yellow + red clear
suggested timing phase 3 is 34.6 secs green, 4.0 secs yellow + red clear

CINCH PROGRAM VERSION DATE 4-29-1988
1985 HCM - CHAPTER 9: SIGNALIZED - OPERATIONAL ANALYSIS
HARTWELL AVE/BEDFORD ST (4 &225)
am 1995
date:08-21-1991 time:22:28:06
LAST DATA SET NAMES LOADED OR SAVED
VOLUME=21am95 GEOMETRICS=21am95 SIGNAL=21am95o
LOCATED IN CBD:N
VOLUME & GEOMETRICS

	VOLUMES			# OF LANES			LANE WIDTH			CROSS
DIR	LT	TH	RT	LT	TH	RT	LT	TH	RT	WALK
EB	0	1054	439	0	2	1	0.0	10.0	12.0	0
WB	0	690	0	0	2	0	0.0	10.0	0.0	0
NB	164	0	356	1	0	1	12.0	0.0	12.0	0
SB	253	1297	0	0	2	0	0.0	10.0	0.0	0

TRAFFIC & ROADWAY CONDITIONS

			ADJ PARK			PEDESTRIANS				ARR
DIR	GRADE	%HV	Y/N	MOVES	BUSES	PHF	CROSS	BUT	MIN TIME	TYPE
EB	-2.9%	3.5%	N	0	0	.920	0	N	7.0	3
WB	2.4%	5.6%	N	0	5	.910	0	N	7.0	3
NB	2.0%	6.7%	N	0	0	.890	0	N	7.0	3
SB	2.0%	1.1%	N	0	0	.960	0	N	7.0	3

PHASINGS

	EASTBOUND				WESTBOUND				NORTHBOUND				SOUTHBOUND				GREEN	Y+R	PRE/ACT
	l	t	r	p	l	t	r	p	l	t	r	p	l	t	r	p			
1			*						*		*						7.6	0	A
2			*						*		*		*	*	*		53.7	4	A
3		*	*		*	*											37.6	4	A

CYCLE= 106.9

VOLUME ADJUSTMENT WORKSHEET
PART 1 (MOVEMENT ADJUSTMENTS)

DIR	LTV	THV	RTV	PHF	LTFR	THFR	RTFR
EB	0	1054	439	.920	0	1146	477
WB	0	690	0	.910	0	758	0
NB	164	0	356	.890	184	0	400
SB	253	1297	0	.960	264	1351	0

PART 2 (LANE GROUP ADJUSTMENTS)

DIR	LN GROUP	FLOW	N	LU	v	Plt	Prt
EB	TH	1146	2	1.05	1203	0.00	0.00
EB	RT	477	1	1.00	477	0.00	1.00
WB	TH	758	2	1.05	796	0.00	0.00
NB	LT	184	1	1.00	184	1.00	0.00
NB	RT	400	1	1.00	400	0.00	1.00
SB	LT-TH	1615	2	1.05	1695	0.16	0.00

PART 3 (OPPOSING VOLUME ADJUSTMENTS)

LEFT TURN	OPPOSING APPROACH									
BEING OPPOSED	VOLUMES			% OPPOSING LEFT TURN			# LANES			OPPOSING
	LT	TH	RT	LT	TH	RT	LT	TH	RT	VOLUME
NORTHBOUND	264	1351	0	100	100	100	0	2	0	1399
SOUTHBOUND	184	0	400	0	0	0	1	0	1	0

SATURATION FLOW ADJUSTMENT WORKSHEET

DIR	LN GROUP	IDEAL	N	Fwid	Fhv	Fgr	Fpark	Fbus	Farea	Frt	Flt	s
EB	TH	1800	2	0.933	0.983	1.015	1.000	1.000	1.000	1.000	1.000	3350
EB	RT	1800	1	1.000	0.983	1.015	1.000	1.000	1.000	0.850	1.000	1525
WB	TH	1800	2	0.933	0.973	0.988	1.000	0.990	1.000	1.000	1.000	3195
NB	LT	1800	1	1.000	0.968	0.990	1.000	1.000	1.000	1.000	0.950	1638
NB	RT	1800	1	1.000	0.968	0.990	1.000	1.000	1.000	0.850	1.000	1466
SB	LT-TH	1800	2	0.933	0.995	0.990	1.000	1.000	1.000	1.000	1.000	3309

CAPACITY ANALYSIS WORKSHEET

DIR	LN GROUP	v	s	v/s	g/C	c	v/c	CRITICAL
EB	TH	1203	3350	0.36	0.35	1179	1.02	*
EB	RT	477	1525	0.31	0.96	1468	0.32	
WB	TH	796	3195	0.25	0.35	1125	0.71	
NB	LT	184	1638	0.07	0.07	180	1.02	*
NB	RT	400	1466	0.27	0.57	840	0.48	
SB	LT-TH	1695	3309	0.51	0.50	1662	1.02	*

CYCLE=106.9 LOST= 8.0 SUM V/S CRIT= 0.94 TOTAL V/C= 1.02
FOR THE NORTHBOUND PROTECTED/PERMISSIVE LEFT TURN LANE THE CAPACITY, V/S AND V/C RATIOS HAVE ALL BEEN ADJUSTED TO REFLECT A CAPACITY FOR 65 LEFT TURNS ON THE CHANGE INTERVAL AND 0 ON THE PERMISSIVE PHASE

LEVEL OF SERVICE WORKSHEET

DIR	LN GROUP	v/c	g/C	C	d1	c	d2	PF	Delay	LOS	Avg Q	95% Q
EB	TH	1.02	0.35	106.9	26.61	1179	25.07	0.85	43.93	E	25.0	43
EB	RT	0.32	0.96	106.9	0.08	1468	0.05	0.85	0.11	A	0.5	1
WB	TH	0.71	0.35	106.9	22.71	1125	1.45	0.85	20.54	C	14.6	15
NB	LT	1.02	0.57	106.9	17.84	180	58.15	1.00	76.00	F	6.4	13
NB	RT	0.48	0.57	106.9	10.18	840	0.34	0.85	8.94	B	5.1	5
SB	LT-TH	1.02	0.50	106.9	20.63	1662	21.79	0.85	36.06	D	28.1	49

DIR	Delay	LOS
EB	31.48	D
WB	20.54	C
NB	30.09	D
SB	36.06	D

INTERSECTION DELAY = 31.11 INTERSECTION LOS=D

THE CYCLE LENGTH WITHIN THE BOUNDS OF 60 TO 120 SECONDS
WHICH MINIMIZES CRITICAL MOVEMENT DELAY IS 106.9 SECONDS

FOR A V/C RATIO OF .95 THE CYCLE SHOULD BE %1209.4 SECONDS
THE EXISTING TIMING IS OPTIMAL

CINCH PROGRAM VERSION DATE 4-29-1988
1985 HCM - CHAPTER 9: SIGNALIZED - OPERATIONAL ANALYSIS
HARTWELL AVE/BEDFORD ST (4 &225)
am 1995 b
date:08-21-1991 time:22:35:31
LAST DATA SET NAMES LOADED OR SAVED
VOLUME=21am95b GEOMETRICS=21am95 SIGNAL=21am95b
LOCATED IN CBD:N
VOLUME & GEOMETRICS

	VOLUMES			# OF LANES			LANE WIDTH			CROSS
DIR	LT	TH	RT	LT	TH	RT	LT	TH	RT	WALK
EB	0	1054	447	0	2	1	0.0	10.0	12.0	0
WB	0	690	0	0	2	0	0.0	10.0	0.0	0
NB	166	0	356	1	0	1	12.0	0.0	12.0	0
SB	253	1356	0	0	2	0	0.0	10.0	0.0	0

TRAFFIC & ROADWAY CONDITIONS

			ADJ PARK			PEDESTRIANS				ARR
DIR	GRADE	%HV	Y/N	MOVES	BUSES	PHF	CROSS	BUT	MIN TIME	TYPE
EB	-2.9%	3.5%	N	0	0	.920	0	N	7.0	3
WB	2.4%	5.6%	N	0	5	.910	0	N	7.0	3
NB	2.0%	6.7%	N	0	0	.890	0	N	7.0	3
SB	2.0%	1.1%	N	0	0	.960	0	N	7.0	3

PHASINGS

	EASTBOUND				WESTBOUND				NORTHBOUND				SOUTHBOUND				GREEN	Y+R	PRE/ACT
	l	t	r	p	l	t	r	p	l	t	r	p	l	t	r	p			
1			*							*		*					8.5	0	A
2			*							*		*		*	*	*	59.6	4	A
3		*	*			*	*										40.2	4	A

CYCLE= 116.4

VOLUME ADJUSTMENT WORKSHEET
PART 1 (MOVEMENT ADJUSTMENTS)

DIR	LTV	THV	RTV	PHF	LTFR	THFR	RTFR
EB	0	1054	447	.920	0	1146	486
WB	0	690	0	.910	0	758	0
NB	166	0	356	.890	187	0	400
SB	253	1356	0	.960	264	1413	0

PART 2 (LANE GROUP ADJUSTMENTS)

DIR	LN GROUP	FLOW	N	LU	v	Plt	Prt
EB	TH	1146	2	1.05	1203	0.00	0.00
EB	RT	486	1	1.00	486	0.00	1.00
WB	TH	758	2	1.05	796	0.00	0.00
NB	LT	187	1	1.00	187	1.00	0.00
NB	RT	400	1	1.00	400	0.00	1.00
SB	LT-TH	1676	2	1.05	1760	0.16	0.00

PART 3 (OPPOSING VOLUME ADJUSTMENTS)

LEFT TURN BEING OPPOSED	OPPOSING APPROACH VOLUMES			% OPPOSING LEFT TURN			# LANES			OPPOSING
	LT	TH	RT	LT	TH	RT	LT	TH	RT	VOLUME
NORTHBOUND	264	1413	0	100	100	100	0	2	0	1399
SOUTHBOUND	187	0	400	0	0	0	1	0	1	0

SATURATION FLOW ADJUSTMENT WORKSHEET

DIR	LN GROUP	IDEAL	N	Fwid	Fhv	Fgr	Fpark	Fbus	Farea	Frt	Flt	s
EB	TH	1800	2	0.933	0.983	1.015	1.000	1.000	1.000	1.000	1.000	3350
EB	RT	1800	1	1.000	0.983	1.015	1.000	1.000	1.000	0.850	1.000	1525
WB	TH	1800	2	0.933	0.973	0.988	1.000	0.990	1.000	1.000	1.000	3195
NB	LT	1800	1	1.000	0.968	0.990	1.000	1.000	1.000	1.000	0.950	1638
NB	RT	1800	1	1.000	0.968	0.990	1.000	1.000	1.000	0.850	1.000	1466
SB	LT-TH	1800	2	0.933	0.995	0.990	1.000	1.000	1.000	1.000	1.000	3309

CAPACITY ANALYSIS WORKSHEET

DIR	LN GROUP	v	s	v/s	g/C	c	v/c	CRITICAL
EB	TH	1203	3350	0.36	0.35	1158	1.04	*
EB	RT	486	1525	0.32	0.97	1473	0.33	
WB	TH	796	3195	0.25	0.35	1105	0.72	
NB	LT	187	1638	0.08	0.07	180	1.04	*
NB	RT	400	1466	0.27	0.59	858	0.47	
SB	LT-TH	1760	3309	0.53	0.51	1695	1.04	*

CYCLE=116.4 LOST= 8.0 SUM V/S CRIT= 0.97 TOTAL V/C= 1.04
FOR THE NORTHBOUND PROTECTED/PERMISSIVE LEFT TURN LANE THE CAPACITY, V/S AND V/C RATIOS HAVE ALL BEEN ADJUSTED TO REFLECT A CAPACITY FOR
59 LEFT TURNS ON THE CHANGE INTERVAL AND 0 ON THE PERMISSIVE PHASE

LEVEL OF SERVICE WORKSHEET

DIR	LN GROUP	v/c	g/C	C	d1	c	d2	PF	Delay	LOS	Avg Q	95% Q
EB	TH	1.04	0.35	116.4	29.54	1158	30.67	0.85	51.18	E	28.4	50
EB	RT	0.33	0.97	116.4	0.08	1473	0.05	0.85	0.11	A	0.5	1
WB	TH	0.72	0.35	116.4	25.21	1105	1.62	0.85	22.81	C	16.0	16
NB	LT	1.04	0.59	116.4	19.40	180	64.59	1.00	83.99	F	7.1	14
NB	RT	0.47	0.59	116.4	10.45	858	0.30	0.85	9.14	B	5.4	5
SB	LT-TH	1.04	0.51	116.4	22.49	1695	27.02	0.85	42.08	E	32.8	60

DIR	Delay	LOS
EB	36.49	D
WB	22.81	C
NB	32.94	D
SB	42.08	E

INTERSECTION DELAY = 35.84 INTERSECTION LOS=D

THE CYCLE LENGTH WITHIN THE BOUNDS OF 60 TO 120 SECONDS
WHICH MINIMIZES CRITICAL MOVEMENT DELAY IS 116.4 SECONDS

THE V/C RATIO CAN'T BE .95 FOR THE GIVEN CONDITIONS
THE EXISTING TIMING IS OPTIMAL

CINCH PROGRAM VERSION DATE 4-29-1988
1985 HCM - CHAPTER 9: SIGNALIZED - OPERATIONAL ANALYSIS
HARTWELL AVE/BEDFORD ST (4 &225)
PM Peak Hour
date:08-16-1991 time:19:01:01
LAST DATA SET NAMES LOADED OR SAVED
VOLUME=21pm90 GEOMETRICS=21pm90 SIGNAL=21pm90
LOCATED IN CBD:N
VOLUME & GEOMETRICS

	VOLUMES			# OF LANES			LANE WIDTH			CROSS
DIR	LT	TH	RT	LT	TH	RT	LT	TH	RT	WALK
EB	0	1000	270	0	2	1	0.0	10.0	12.0	0
WB	0	1080	0	0	2	0	0.0	10.0	0.0	0
NB	393	0	1148	1	0	2	12.0	0.0	12.0	0
SB	81	417	0	0	2	0	0.0	10.0	0.0	0

TRAFFIC & ROADWAY CONDITIONS

			ADJ PARK			PEDESTRIANS				ARR
DIR	GRADE	%HV	Y/N	MOVES	BUSES	PHF	CROSS	BUT	MIN TIME	TYPE
EB	-2.9%	2.0%	N	0	0	.890	0	N	7.0	3
WB	2.4%	7.2%	N	0	5	.900	0	N	7.0	3
NB	2.0%	2.5%	N	0	0	.880	0	N	7.0	3
SB	2.0%	2.3%	N	0	0	.880	0	N	7.0	3

PHASINGS

	EASTBOUND				WESTBOUND				NORTHBOUND				SOUTHBOUND				GREEN	Y+R	PRE/ACT
	l	t	r	p	l	t	r	p	l	t	r	p	l	t	r	p			
1			*						*		*						28.8	0	A
2			*						*		*		*	*	*		22.7	4	A
3		*	*		*	*											39.4	4	A

CYCLE= 98.9

VOLUME ADJUSTMENT WORKSHEET
PART 1 (MOVEMENT ADJUSTMENTS)

DIR	LTV	THV	RTV	PHF	LTFR	THFR	RTFR
EB	0	1000	270	.890	0	1124	303
WB	0	1080	0	.900	0	1200	0
NB	393	0	1148	.880	447	0	1305
SB	81	417	0	.880	92	474	0

PART 2 (LANE GROUP ADJUSTMENTS)

DIR	LN GROUP	FLOW	N	LU	v	Plt	Prt
EB	TH	1124	2	1.05	1180	0.00	0.00
EB	RT	303	1	1.00	303	0.00	1.00
WB	TH	1200	2	1.05	1260	0.00	0.00
NB	LT	447	1	1.00	447	1.00	0.00
NB	RT	1305	2	1.05	1370	0.00	1.00
SB	LT-TH	566	2	1.05	594	0.16	0.00

PART 3 (OPPOSING VOLUME ADJUSTMENTS)

LEFT TURN	OPPOSING APPROACH									
BEING OPPOSED	VOLUMES			% OPPOSING LEFT TURN			# LANES			OPPOSING
	LT	TH	RT	LT	TH	RT	LT	TH	RT	VOLUME
NORTHBOUND	92	474	0	100	100	100	0	2	0	566
SOUTHBOUND	447	0	1305	0	0	0	1	0	2	0

SATURATION FLOW ADJUSTMENT WORKSHEET

DIR	LN GROUP	IDEAL	N	Fwid	Fhv	Fgr	Fpark	Fbus	Farea	Frt	Flt	s
EB	TH	1800	2	0.933	0.990	1.015	1.000	1.000	1.000	1.000	1.000	3376
EB	RT	1800	1	1.000	0.990	1.015	1.000	1.000	1.000	0.850	1.000	1537
WB	TH	1800	2	0.933	0.965	0.988	1.000	0.990	1.000	1.000	1.000	3171
NB	LT	1800	1	1.000	0.988	0.990	1.000	1.000	1.000	1.000	0.950	1672
NB	RT	1800	2	1.000	0.988	0.990	1.000	1.000	1.000	0.750	1.000	2640
SB	LT-TH	1800	2	0.933	0.989	0.990	1.000	1.000	1.000	1.000	1.000	3288

CAPACITY ANALYSIS WORKSHEET

DIR	LN GROUP	v	s	v/s	g/C	c	v/c	CRITICAL
EB	TH	1180	3376	0.35	0.40	1346	0.88	
EB	RT	303	1537	0.20	0.96	1475	0.21	
WB	TH	1260	3171	0.40	0.40	1264	1.00	*
NB	LT	447	1672	0.23	0.29	558	0.80	
NB	RT	1370	2640	0.52	0.52	1374	1.00	*
SB	LT-TH	594	3288	0.18	0.23	755	0.79	

CYCLE= 98.9 LOST= 8.0 SUM V/S CRIT= 0.92 TOTAL V/C= 1.00
FOR THE NORTHBOUND PROTECTED/PERMISSIVE LEFT TURN LANE THE CAPACITY, V/S AND V/C RATIOS HAVE ALL BEEN ADJUSTED TO REFLECT A CAPACITY FOR
71 LEFT TURNS ON THE CHANGE INTERVAL AND 0 ON THE PERMISSIVE PHASE

LEVEL OF SERVICE WORKSHEET

DIR	LN GROUP	v/c	g/C	C	d1	c	d2	PF	Delay	LOS	Avg Q	95% Q
EB	TH	0.88	0.40	98.9	20.89	1346	4.89	0.85	21.92	C	18.6	21
EB	RT	0.21	0.96	98.9	0.08	1475	0.01	0.85	0.07	A	0.3	1
WB	TH	1.00	0.40	98.9	22.55	1264	18.77	0.85	35.12	D	21.6	36
NB	LT	0.80	0.52	98.9	14.82	558	5.67	1.00	20.49	C	8.7	9
NB	RT	1.00	0.52	98.9	17.96	1374	17.98	0.85	30.54	D	19.7	34
SB	LT-TH	0.79	0.23	98.9	27.23	755	3.87	0.85	26.44	D	12.0	13

DIR	Delay	LOS
EB	17.45	C
WB	35.12	D
NB	28.07	D
SB	26.44	D

INTERSECTION DELAY = 26.55 INTERSECTION LOS=D

THE CYCLE LENGTH WITHIN THE BOUNDS OF 60 TO 120 SECONDS
WHICH MINIMIZES CRITICAL MOVEMENT DELAY IS 98.9 SECONDS

FOR A V/C RATIO OF .95 THE CYCLE SHOULD BE 224.6 SECONDS
for chosen cycle length 98.9
suggested timing phase 1 is 29.0 secs green, 0.0 secs yellow + red clear
suggested timing phase 2 is 22.5 secs green, 4.0 secs yellow + red clear
suggested timing phase 3 is 39.4 secs green, 4.0 secs yellow + red clear

CINCH PROGRAM VERSION DATE 4-29-1988
1985 HCM - CHAPTER 9: SIGNALIZED - OPERATIONAL ANALYSIS
HARTWELL AVE/BEDFORD ST (4 &225)
PM 95 nb
date:08-20-1991 time:00:21:54
LAST DATA SET NAMES LOADED OR SAVED
VOLUME=21pm95n GEOMETRICS=21pm95n SIGNAL=21pm95n
LOCATED IN CBD:N
VOLUME & GEOMETRICS

	VOLUMES			# OF LANES			LANE WIDTH			CROSS
DIR	LT	TH	RT	LT	TH	RT	LT	TH	RT	WALK
EB	0	1061	243	0	2	1	0.0	10.0	12.0	0
WB	0	1101	0	0	2	0	0.0	10.0	0.0	0
NB	380	0	1076	1	0	2	12.0	0.0	12.0	0
SB	74	384	0	0	2	0	0.0	10.0	0.0	0

TRAFFIC & ROADWAY CONDITIONS

			ADJ PARK			PEDESTRIANS				ARR
DIR	GRADE	%HV	Y/N	MOVES	BUSES	PHF	CROSS	BUT	MIN TIME	TYPE
EB	-2.9%	2.0%	N	0	0	.890	0	N	7.0	3
WB	2.4%	7.2%	N	0	5	.900	0	N	7.0	3
NB	2.0%	2.5%	N	0	0	.880	0	N	7.0	3
SB	2.0%	2.3%	N	0	0	.880	0	N	7.0	3

PHASINGS

	EASTBOUND				WESTBOUND				NORTHBOUND				SOUTHBOUND				GREEN	Y+R	PRE/ACT
	l	t	r	p	l	t	r	p	l	t	r	p	l	t	r	p			
1			*							*		*					25.2	0	P
2			*							*		*		*		*	18.9	4	A
3		*	*			*	*										36.8	4	A

CYCLE= 89.0

VOLUME ADJUSTMENT WORKSHEET
PART 1 (MOVEMENT ADJUSTMENTS)

DIR	LTV	THV	RTV	PHF	LTFR	THFR	RTFR
EB	0	1061	243	.890	0	1192	273
WB	0	1101	0	.900	0	1223	0
NB	380	0	1076	.880	432	0	1223
SB	74	384	0	.880	84	436	0

PART 2 (LANE GROUP ADJUSTMENTS)

DIR	LN GROUP	FLOW	N	LU	v	Plt	Prt
EB	TH	1192	2	1.05	1252	0.00	0.00
EB	RT	273	1	1.00	273	0.00	1.00
WB	TH	1223	2	1.05	1285	0.00	0.00
NB	LT	432	1	1.00	432	1.00	0.00
NB	RT	1223	2	1.05	1284	0.00	1.00
SB	LT-TH	520	2	1.05	546	0.16	0.00

PART 3 (OPPOSING VOLUME ADJUSTMENTS)

LEFT TURN	OPPOSING APPROACH									
BEING OPPOSED	VOLUMES			% OPPOSING LEFT TURN			# LANES			OPPOSING
	LT	TH	RT	LT	TH	RT	LT	TH	RT	VOLUME
NORTHBOUND	84	436	0	100	100	100	0	2	0	520
SOUTHBOUND	432	0	1223	0	0	0	1	0	2	0

SATURATION FLOW ADJUSTMENT WORKSHEET

DIR	LN GROUP	IDEAL	N	Fwid	Fhv	Fgr	Fpark	Fbus	Farea	Frt	Flt	s
EB	TH	1800	2	0.933	0.990	1.015	1.000	1.000	1.000	1.000	1.000	3376
EB	RT	1800	1	1.000	0.990	1.015	1.000	1.000	1.000	0.850	1.000	1537
WB	TH	1800	2	0.933	0.965	0.988	1.000	0.990	1.000	1.000	1.000	3171
NB	LT	1800	1	1.000	0.988	0.990	1.000	1.000	1.000	1.000	0.950	1672
NB	RT	1800	2	1.000	0.988	0.990	1.000	1.000	1.000	0.750	1.000	2640
SB	LT-TH	1800	2	0.933	0.989	0.990	1.000	1.000	1.000	1.000	1.000	3288

CAPACITY ANALYSIS WORKSHEET

DIR	LN GROUP	v	s	v/s	g/C	c	v/c	CRITICAL
EB	TH	1252	3376	0.37	0.41	1396	0.90	
EB	RT	273	1537	0.18	0.96	1468	0.19	
WB	TH	1285	3171	0.41	0.41	1312	0.98	*
NB	LT	432	1672	0.22	0.28	553	0.78	
NB	RT	1284	2640	0.49	0.50	1311	0.98	*
SB	LT-TH	546	3288	0.17	0.21	700	0.78	

CYCLE= 89.0 LOST= 8.0 SUM V/S CRIT= 0.89 TOTAL V/C= 0.98
FOR THE NORTHBOUND PROTECTED/PERMISSIVE LEFT TURN LANE THE CAPACITY, V/S AND V/C RATIOS HAVE ALL BEEN ADJUSTED TO REFLECT A CAPACITY FOR 79 LEFT TURNS ON THE CHANGE INTERVAL AND 0 ON THE PERMISSIVE PHASE

LEVEL OF SERVICE WORKSHEET

DIR	LN GROUP	v/c	g/C	C	d1	c	d2	PF	Delay	LOS	Avg Q	95% Q
EB	TH	0.90	0.41	89.0	18.48	1396	5.76	1.00	24.24	C	17.3	25
EB	RT	0.19	0.96	89.0	0.08	1468	0.01	1.00	0.09	A	0.3	1
WB	TH	0.98	0.41	89.0	19.55	1312	15.04	1.00	34.59	D	20.6	36
NB	LT	0.78	0.50	89.0	14.00	553	4.90	1.00	18.89	C	7.6	8
NB	RT	0.98	0.50	89.0	16.69	1311	15.04	1.00	31.73	D	18.4	33
SB	LT-TH	0.78	0.21	89.0	25.13	700	3.95	1.00	29.07	D	10.1	14

DIR	Delay	LOS
EB	19.92	C
WB	34.59	D
NB	28.50	D
SB	29.07	D

INTERSECTION DELAY = 27.52 INTERSECTION LOS=D

THE CYCLE LENGTH WITHIN THE BOUNDS OF 60 TO 120 SECONDS
WHICH MINIMIZES CRITICAL MOVEMENT DELAY IS 89.0 SECONDS

FOR A V/C RATIO OF .95 THE CYCLE SHOULD BE 129.6 SECONDS
THE EXISTING TIMING IS OPTIMAL

CINCH PROGRAM VERSION DATE 4-29-1988
1985 HCM - CHAPTER 9: SIGNALIZED - OPERATIONAL ANALYSIS
HARTWELL AVE/BEDFORD ST (4 &225)
pm 95 b
date:08-20-1991 time:00:25:30
LAST DATA SET NAMES LOADED OR SAVED
VOLUME=21pm95b GEOMETRICS=21pm95b SIGNAL=21pm95b
LOCATED IN CBD:N
VOLUME & GEOMETRICS

	VOLUMES			# OF LANES			LANE WIDTH			CROSS
DIR	LT	TH	RT	LT	TH	RT	LT	TH	RT	WALK
EB	0	1061	245	0	2	1	0.0	10.0	12.0	0
WB	0	1101	0	0	2	0	0.0	10.0	0.0	0
NB	384	0	1115	1	0	2	12.0	0.0	12.0	0
SB	74	388	0	0	2	0	0.0	10.0	0.0	0

TRAFFIC & ROADWAY CONDITIONS

			ADJ PARK			PEDESTRIANS				ARR
DIR	GRADE	%HV	Y/N	MOVES	BUSES	PHF	CROSS	BUT	MIN TIME	TYPE
EB	-2.9%	2.0%	N	0	0	.890	0	N	7.0	3
WB	2.4%	7.2%	N	0	5	.900	0	N	7.0	3
NB	2.0%	2.5%	N	0	0	.880	0	N	7.0	3
SB	2.0%	2.3%	N	0	0	.880	0	N	7.0	3

PHASINGS

	EASTBOUND				WESTBOUND				NORTHBOUND				SOUTHBOUND				GREEN	Y+R	PRE/ACT
	l	t	r	p	l	t	r	p	l	t	r	p	l	t	r	p			
1			*						*		*						28.0	0	P
2			*						*		*		*	*	*		20.7	4	A
3		*	*		*	*											39.2	4	A

CYCLE= 95.9

VOLUME ADJUSTMENT WORKSHEET
PART 1 (MOVEMENT ADJUSTMENTS)

DIR	LTV	THV	RTV	PHF	LTFR	THFR	RTFR
EB	0	1061	245	.890	0	1192	275
WB	0	1101	0	.900	0	1223	0
NB	384	0	1115	.880	436	0	1267
SB	74	388	0	.880	84	441	0

PART 2 (LANE GROUP ADJUSTMENTS)

DIR	LN GROUP	FLOW	N	LU	v	Plt	Prt
EB	TH	1192	2	1.05	1252	0.00	0.00
EB	RT	275	1	1.00	275	0.00	1.00
WB	TH	1223	2	1.05	1285	0.00	0.00
NB	LT	436	1	1.00	436	1.00	0.00
NB	RT	1267	2	1.05	1330	0.00	1.00
SB	LT-TH	525	2	1.05	551	0.16	0.00

PART 3 (OPPOSING VOLUME ADJUSTMENTS)

LEFT TURN	OPPOSING APPROACH									
BEING OPPOSED	VOLUMES			% OPPOSING LEFT TURN			# LANES			OPPOSING
	LT	TH	RT	LT	TH	RT	LT	TH	RT	VOLUME
NORTHBOUND	84	441	0	100	100	100	0	2	0	525
SOUTHBOUND	436	0	1267	0	0	0	1	0	2	0

SATURATION FLOW ADJUSTMENT WORKSHEET

DIR	LN GROUP	IDEAL	N	Fwid	Fhv	Fgr	Fpark	Fbus	Farea	Frt	Flt	s
EB	TH	1800	2	0.933	0.990	1.015	1.000	1.000	1.000	1.000	1.000	3376
EB	RT	1800	1	1.000	0.990	1.015	1.000	1.000	1.000	0.850	1.000	1537
WB	TH	1800	2	0.933	0.965	0.988	1.000	0.990	1.000	1.000	1.000	3171
NB	LT	1800	1	1.000	0.988	0.990	1.000	1.000	1.000	1.000	0.950	1672
NB	RT	1800	2	1.000	0.988	0.990	1.000	1.000	1.000	0.750	1.000	2640
SB	LT-TH	1800	2	0.933	0.989	0.990	1.000	1.000	1.000	1.000	1.000	3288

CAPACITY ANALYSIS WORKSHEET

DIR	LN GROUP	v	s	v/s	g/C	c	v/c	CRITICAL
EB	TH	1252	3376	0.37	0.41	1379	0.91	
EB	RT	275	1537	0.18	0.96	1473	0.19	
WB	TH	1285	3171	0.41	0.41	1295	0.99	*
NB	LT	436	1672	0.23	0.29	562	0.78	
NB	RT	1330	2640	0.50	0.51	1342	0.99	*
SB	LT-TH	551	3288	0.17	0.22	710	0.78	

CYCLE= 95.9 LOST= 8.0 SUM V/S CRIT= 0.91 TOTAL V/C= 0.99
FOR THE NORTHBOUND PROTECTED/PERMISSIVE LEFT TURN LANE THE CAPACITY, V/S AND V/C RATIOS HAVE ALL BEEN ADJUSTED TO REFLECT A CAPACITY FOR
73 LEFT TURNS ON THE CHANGE INTERVAL AND 0 ON THE PERMISSIVE PHASE

LEVEL OF SERVICE WORKSHEET

DIR	LN GROUP	v/c	g/C	C	d1	c	d2	PF	Delay	LOS	Avg Q	95% Q
EB	TH	0.91	0.41	95.9	20.27	1379	6.53	1.00	26.80	D	18.8	28
EB	RT	0.19	0.96	95.9	0.08	1473	0.01	1.00	0.08	A	0.3	1
WB	TH	0.99	0.41	95.9	21.43	1295	17.47	1.00	38.91	D	22.9	41
NB	LT	0.78	0.51	95.9	14.56	562	4.69	1.00	19.26	C	8.2	8
NB	RT	0.99	0.51	95.9	17.77	1342	17.15	1.00	34.92	D	20.6	38
SB	LT-TH	0.78	0.22	95.9	26.91	710	3.76	1.00	30.67	D	11.0	14

DIR	Delay	LOS
EB	21.98	C
WB	38.91	D
NB	31.05	D
SB	30.67	D

INTERSECTION DELAY = 30.28 INTERSECTION LOS=D

THE CYCLE LENGTH WITHIN THE BOUNDS OF 60 TO 120 SECONDS
WHICH MINIMIZES CRITICAL MOVEMENT DELAY IS 95.9 SECONDS

FOR A V/C RATIO OF .95 THE CYCLE SHOULD BE 185.3 SECONDS
THE EXISTING TIMING IS OPTIMAL

CINCH PROGRAM VERSION DATE 4-29-1988
1985 HCM - CHAPTER 9: SIGNALIZED - OPERATIONAL ANALYSIS
Rts. 4/225 at Shawsheen (#32)
1990 AM Peak Hour
date:08-22-1991 time:01:59:47
LAST DATA SET NAMES LOADED OR SAVED
VOLUME=32am90 GEOMETRICS=32am90 SIGNAL=32am90
LOCATED IN CBD:N
VOLUME & GEOMETRICS

	VOLUMES			# OF LANES			LANE WIDTH			CROSS
DIR	LT	TH	RT	LT	TH	RT	LT	TH	RT	WALK
EB	17	844	13	0	2	0	0.0	8.0	0.0	33
WB	4	662	120	0	2	0	0.0	8.0	0.0	33
NB	18	7	16	0	1	0	0.0	13.5	0.0	27
SB	525	3	13	0	1	0	0.0	11.0	0.0	26

TRAFFIC & ROADWAY CONDITIONS

			ADJ PARK			PEDESTRIANS				ARR
DIR	GRADE	%HV	Y/N	MOVES	BUSES	PHF	CROSS	BUT	MIN TIME	TYPE
EB	3.0%	5.2%	N	0	2	.930	0	N	15.3	3
WB	-3.3%	4.3%	N	0	2	.930	0	N	15.3	3
NB	2.6%	7.1%	N	0	0	.810	0	N	13.8	3
SB	-2.0%	2.0%	N	0	0	.880	0	N	13.8	3

PHASINGS

	EASTBOUND				WESTBOUND				NORTHBOUND				SOUTHBOUND				GREEN	Y+R	PRE/ACT
	l	t	r	p	l	t	r	p	l	t	r	p	l	t	r	p			
1									*	*	*		*	*	*		25.0	3	P
2	*	*	*		*	*	*										46.0	3	P

CYCLE= 77.0

VOLUME ADJUSTMENT WORKSHEET
PART 1 (MOVEMENT ADJUSTMENTS)

DIR	LTV	THV	RTV	PHF	LTFR	THFR	RTFR
EB	17	844	13	.930	18	908	14
WB	4	662	120	.930	4	712	129
NB	18	7	16	.810	22	9	20
SB	525	3	13	.880	597	3	15

PART 2 (LANE GROUP ADJUSTMENTS)

DIR	LN GROUP	FLOW	N	LU	v	Plt	Prt
EB	LT-TH-RT	940	2	1.05	987	0.02	0.01
WB	LT-TH-RT	845	2	1.05	887	0.01	0.15
NB	LT-TH-RT	51	1	1.00	51	0.44	0.39
SB	LT-TH-RT	615	1	1.00	615	0.97	0.02

PART 3 (OPPOSING VOLUME ADJUSTMENTS)

LEFT TURN	OPPOSING APPROACH									
BEING OPPOSED	VOLUMES			% OPPOSING LEFT TURN			# LANES			OPPOSING
	LT	TH	RT	LT	TH	RT	LT	TH	RT	VOLUME
EASTBOUND	4	712	129	100	100	100	0	2	0	845
WESTBOUND	18	908	14	100	100	100	0	2	0	940
NORTHBOUND	597	3	15	100	100	100	0	1	0	18
SOUTHBOUND	22	9	20	100	100	100	0	1	0	28

SATURATION FLOW ADJUSTMENT WORKSHEET

DIR	LN GROUP	IDEAL	N	Fwid	Fhv	Fgr	Fpark	Fbus	Farea	Frt	Flt	s
EB	LT-TH-RT	1800	2	0.867	0.975	0.985	1.000	0.996	1.000	0.998	0.948	2822
WB	LT-TH-RT	1800	2	0.867	0.979	1.017	1.000	0.996	1.000	0.977	0.991	2995
NB	LT-TH-RT	1800	1	1.050	0.966	0.987	1.000	1.000	1.000	0.847	0.992	1514
SB	LT-TH-RT	1800	1	0.967	0.990	1.010	1.000	1.000	1.000	0.897	0.898	1401

SUPPLEMENTAL WORKSHEET FOR LEFT-TURN ADJUSTMENT FACTOR FLT

INPUT VARIABLES

DIR	C	G	N	Va	Vm	Vlt	Plt	No	Vo	Plto
EB	77	46	2	940	940	18	0.02	2	845	0.01
WB	77	46	2	845	845	4	0.01	2	940	0.02
NB	77	25	1	51	28	22	0.44	1	18	0.97
SB	77	25	1	615	18	597	0.97	1	28	0.44

CALCULATIONS

DIR	Sop	Yo	Gu	Fs	Pl	Gq	Pt	Gf	El	Fm	Flt
EB	3547	0.238	36.304	0.347	0.072	9.696	0.928	7.838	3.244	0.897	0.948
WB	3449	0.272	34.391	0.288	0.021	11.609	0.979	10.793	3.911	0.983	0.991
NB	1381	0.013	24.306	0.864	0.439	0.694	0.561	0.464	1.303	0.992	0.992
SB	1589	0.018	24.054	0.857	0.970	0.946	0.030	0.049	1.312	0.898	0.898

CAPACITY ANALYSIS WORKSHEET

DIR	LN GROUP	v	s	v/s	g/C	c	v/c	CRITICAL
EB	LT-TH-RT	987	2822	0.35	0.60	1686	0.59	*
WB	LT-TH-RT	887	2995	0.30	0.60	1789	0.50	
NB	LT-TH-RT	51	1514	0.03	0.32	491	0.10	
SB	LT-TH-RT	615	1401	0.44	0.32	455	1.35	*

CYCLE= 77.0 LOST= 6.0 SUM V/S CRIT= 0.79 TOTAL V/C= 0.86

LEVEL OF SERVICE WORKSHEET

DIR	LN GROUP	v/c	g/C	C	d1	c	d2	PF	Delay	LOS	Avg Q	95% Q
EB	LT-TH-RT	0.59	0.60	77.0	7.29	1686	0.39	1.00	7.69	B	8.1	8
WB	LT-TH-RT	0.50	0.60	77.0	6.74	1789	0.19	1.00	6.93	B	7.3	7
NB	LT-TH-RT	0.10	0.32	77.0	13.81	491	0.00	1.00	13.81	B	0.7	1
SB	LT-TH-RT	1.35	0.32	77.0	23.78	455	241.93	1.00	265.71	F	49.8	137

DIR	Delay	LOS
EB	7.69	B
WB	6.93	B
NB	13.81	B
SB	265.71	F

INTERSECTION DELAY = 70.00 INTERSECTION LOS=F

THE CYCLE LENGTH WITHIN THE BOUNDS OF 60 TO 120 SECONDS
WHICH MINIMIZES CRITICAL MOVEMENT DELAY IS 60.0 SECONDS

FOR A V/C RATIO OF .95 THE CYCLE SHOULD BE 35.3 SECONDS
for chosen cycle length 60.0
suggested timing phase 1 is 30.1 secs green, 3.0 secs yellow + red clear
suggested timing phase 2 is 23.9 secs green, 3.0 secs yellow + red clear

CINCH PROGRAM VERSION DATE 4-29-1988
1985 HCM - CHAPTER 9: SIGNALIZED - OPERATIONAL ANALYSIS
Rts. 4/225 at Shawsheen (#32)
1995 am
date:08-22-1991 time:10:34:10
LAST DATA SET NAMES LOADED OR SAVED
VOLUME=32am95 GEOMETRICS=32am95 SIGNAL=32am90
LOCATED IN CBD:N
VOLUME & GEOMETRICS

	VOLUMES			# OF LANES			LANE WIDTH			CROSS
DIR	LT	TH	RT	LT	TH	RT	LT	TH	RT	WALK
EB	17	941	13	0	2	0	0.0	8.0	0.0	33
WB	4	712	120	0	2	0	0.0	8.0	0.0	33
NB	18	7	16	0	1	0	0.0	13.5	0.0	27
SB	525	3	13	0	1	0	0.0	11.0	0.0	26

TRAFFIC & ROADWAY CONDITIONS

			ADJ PARK			PEDESTRIANS				ARR
DIR	GRADE	%HV	Y/N	MOVES	BUSES	PHF	CROSS	BUT	MIN TIME	TYPE
EB	3.0%	5.2%	N	0	2	.930	0	N	15.3	3
WB	-3.3%	4.3%	N	0	2	.930	0	N	15.3	3
NB	2.6%	7.1%	N	0	0	.810	0	N	13.8	3
SB	-2.0%	2.0%	N	0	0	.880	0	N	13.8	3

PHASINGS

	EASTBOUND				WESTBOUND				NORTHBOUND				SOUTHBOUND				GREEN	Y+R	PRE/ACT
	l	t	r	p	l	t	r	p	l	t	r	p	l	t	r	p			
1									*	*	*		*	*	*		25.0	3	P
2	*	*	*		*	*	*										46.0	3	P

CYCLE= 77.0

VOLUME ADJUSTMENT WORKSHEET
PART 1 (MOVEMENT ADJUSTMENTS)

DIR	LTV	THV	RTV	PHF	LTFR	THFR	RTFR
EB	17	941	13	.930	18	1012	14
WB	4	712	120	.930	4	766	129
NB	18	7	16	.810	22	9	20
SB	525	3	13	.880	597	3	15

PART 2 (LANE GROUP ADJUSTMENTS)

DIR	LN GROUP	FLOW	N	LU	v	Plt	Prt
EB	LT-TH-RT	1044	2	1.05	1096	0.02	0.01
WB	LT-TH-RT	899	2	1.05	944	0.00	0.14
NB	LT-TH-RT	51	1	1.00	51	0.44	0.39
SB	LT-TH-RT	615	1	1.00	615	0.97	0.02

PART 3 (OPPOSING VOLUME ADJUSTMENTS)

LEFT TURN BEING OPPOSED	OPPOSING APPROACH VOLUMES			% OPPOSING LEFT TURN			# LANES			OPPOSING
	LT	TH	RT	LT	TH	RT	LT	TH	RT	VOLUME
EASTBOUND	4	766	129	100	100	100	0	2	0	899
WESTBOUND	18	1012	14	100	100	100	0	2	0	1044
NORTHBOUND	597	3	15	100	100	100	0	1	0	18
SOUTHBOUND	22	9	20	100	100	100	0	1	0	28

SATURATION FLOW ADJUSTMENT WORKSHEET

DIR	LN GROUP	IDEAL	N	Fwid	Fhv	Fgr	Fpark	Fbus	Farea	Frt	Flt	s
EB	LT-TH-RT	1800	2	0.867	0.975	0.985	1.000	0.996	1.000	0.998	0.942	2804
WB	LT-TH-RT	1800	2	0.867	0.979	1.017	1.000	0.996	1.000	0.978	0.979	2961
NB	LT-TH-RT	1800	1	1.050	0.966	0.987	1.000	1.000	1.000	0.847	0.992	1514
SB	LT-TH-RT	1800	1	0.967	0.990	1.010	1.000	1.000	1.000	0.897	0.898	1401

SUPPLEMENTAL WORKSHEET FOR LEFT-TURN ADJUSTMENT FACTOR FLT

INPUT VARIABLES

DIR	C	G	N	Va	Vm	Vlt	Plt	No	Vo	Plto
EB	77	46	2	1044	1044	18	0.02	2	899	0.00
WB	77	46	2	899	899	4	0.00	2	1044	0.02
NB	77	25	1	51	28	22	0.44	1	18	0.97
SB	77	25	1	615	18	597	0.97	1	28	0.44

CALCULATIONS

DIR	Sop	Yo	Gu	Fs	Pl	Gq	Pt	Gf	El	Fm	Flt
EB	3531	0.255	35.414	0.313	0.069	10.586	0.931	8.497	3.592	0.884	0.942
WB	3444	0.303	32.512	0.222	0.024	13.488	0.976	12.312	5.057	0.957	0.979
NB	1381	0.013	24.306	0.864	0.439	0.694	0.561	0.464	1.303	0.992	0.992
SB	1589	0.018	24.054	0.857	0.970	0.946	0.030	0.049	1.312	0.898	0.898

CAPACITY ANALYSIS WORKSHEET

DIR	LN GROUP	v	s	v/s	g/C	c	v/c	CRITICAL
EB	LT-TH-RT	1096	2804	0.39	0.60	1675	0.65	*
WB	LT-TH-RT	944	2961	0.32	0.60	1769	0.53	
NB	LT-TH-RT	51	1514	0.03	0.32	491	0.10	
SB	LT-TH-RT	615	1401	0.44	0.32	455	1.35	*

CYCLE= 77.0 LOST= 6.0 SUM V/S CRIT= 0.83 TOTAL V/C= 0.90

LEVEL OF SERVICE WORKSHEET

DIR	LN GROUP	v/c	g/C	C	d1	c	d2	PF	Delay	LOS	Avg Q	95% Q
EB	LT-TH-RT	0.65	0.60	77.0	7.79	1675	0.66	1.00	8.45	B	9.0	9
WB	LT-TH-RT	0.53	0.60	77.0	6.96	1769	0.25	1.00	7.22	B	7.7	8
NB	LT-TH-RT	0.10	0.32	77.0	13.81	491	0.00	1.00	13.81	B	0.7	1
SB	LT-TH-RT	1.35	0.32	77.0	23.78	455	241.93	1.00	265.71	F	49.8	137

DIR	Delay	LOS
EB	8.45	B
WB	7.22	B
NB	13.81	B
SB	265.71	F

INTERSECTION DELAY = 66.57 INTERSECTION LOS=F

THE CYCLE LENGTH WITHIN THE BOUNDS OF 60 TO 120 SECONDS
WHICH MINIMIZES CRITICAL MOVEMENT DELAY IS 60.0 SECONDS

FOR A V/C RATIO OF .95 THE CYCLE SHOULD BE 47.4 SECONDS
for chosen cycle length 60.0
suggested timing phase 1 is 28.6 secs green, 3.0 secs yellow + red clear
suggested timing phase 2 is 25.4 secs green, 3.0 secs yellow + red clear

CINCH PROGRAM VERSION DATE 4-29-1988
1985 HCM - CHAPTER 9: SIGNALIZED - OPERATIONAL ANALYSIS
Rts. 4/225 at Shawsheen (#32)
1995 am b
date:08-22-1991 time:10:35:37
LAST DATA SET NAMES LOADED OR SAVED
VOLUME=32am95b GEOMETRICS=32am95 SIGNAL=32am90
LOCATED IN CBD:N
VOLUME & GEOMETRICS

	VOLUMES			# OF LANES			LANE WIDTH			CROSS
DIR	LT	TH	RT	LT	TH	RT	LT	TH	RT	WALK
EB	17	949	13	0	2	0	0.0	8.0	0.0	33
WB	4	712	122	0	2	0	0.0	8.0	0.0	33
NB	18	7	16	0	1	0	0.0	13.5	0.0	27
SB	525	3	13	0	1	0	0.0	11.0	0.0	26

TRAFFIC & ROADWAY CONDITIONS

			ADJ PARK			PEDESTRIANS				ARR
DIR	GRADE	%HV	Y/N	MOVES	BUSES	PHF	CROSS	BUT	MIN TIME	TYPE
EB	3.0%	5.2%	N	0	2	.930	0	N	15.3	3
WB	-3.3%	4.3%	N	0	2	.930	0	N	15.3	3
NB	2.6%	7.1%	N	0	0	.810	0	N	13.8	3
SB	-2.0%	2.0%	N	0	0	.880	0	N	13.8	3

PHASINGS

	EASTBOUND				WESTBOUND				NORTHBOUND				SOUTHBOUND				GREEN	Y+R	PRE/ACT
	l	t	r	p	l	t	r	p	l	t	r	p	l	t	r	p			
1									*	*	*		*	*	*		25.0	3	P
2	*	*	*		*	*	*										46.0	3	P

CYCLE= 77.0

VOLUME ADJUSTMENT WORKSHEET
PART 1 (MOVEMENT ADJUSTMENTS)

DIR	LTV	THV	RTV	PHF	LTFR	THFR	RTFR
EB	17	949	13	.930	18	1020	14
WB	4	712	122	.930	4	766	131
NB	18	7	16	.810	22	9	20
SB	525	3	13	.880	597	3	15

PART 2 (LANE GROUP ADJUSTMENTS)

DIR	LN GROUP	FLOW	N	LU	v	Plt	Prt
EB	LT-TH-RT	1053	2	1.05	1105	0.02	0.01
WB	LT-TH-RT	901	2	1.05	946	0.00	0.15
NB	LT-TH-RT	51	1	1.00	51	0.44	0.39
SB	LT-TH-RT	615	1	1.00	615	0.97	0.02

PART 3 (OPPOSING VOLUME ADJUSTMENTS)

LEFT TURN	OPPOSING APPROACH									
BEING OPPOSED	VOLUMES			% OPPOSING LEFT TURN			# LANES			OPPOSING
	LT	TH	RT	LT	TH	RT	LT	TH	RT	VOLUME
EASTBOUND	4	766	131	100	100	100	0	2	0	901
WESTBOUND	18	1020	14	100	100	100	0	2	0	1053
NORTHBOUND	597	3	15	100	100	100	0	1	0	18
SOUTHBOUND	22	9	20	100	100	100	0	1	0	28

SATURATION FLOW ADJUSTMENT WORKSHEET

DIR	LN GROUP	IDEAL	N	Fwid	Fhv	Fgr	Fpark	Fbus	Farea	Frt	Flt	s
EB	LT-TH-RT	1800	2	0.867	0.975	0.985	1.000	0.996	1.000	0.998	0.942	2804
WB	LT-TH-RT	1800	2	0.867	0.979	1.017	1.000	0.996	1.000	0.978	0.977	2955
NB	LT-TH-RT	1800	1	1.050	0.966	0.987	1.000	1.000	1.000	0.847	0.992	1514
SB	LT-TH-RT	1800	1	0.967	0.990	1.010	1.000	1.000	1.000	0.897	0.898	1401

SUPPLEMENTAL WORKSHEET FOR LEFT-TURN ADJUSTMENT FACTOR FLT

INPUT VARIABLES

DIR	C	G	N	Va	Vm	Vlt	Plt	No	Vo	Plto
EB	77	46	2	1053	1053	18	0.02	2	901	0.00
WB	77	46	2	901	901	4	0.00	2	1053	0.02
NB	77	25	1	51	28	22	0.44	1	18	0.97
SB	77	25	1	615	18	597	0.97	1	28	0.44

CALCULATIONS

DIR	Sop	Yo	Gu	Fs	Pl	Gq	Pt	Gf	El	Fm	Flt
EB	3530	0.255	35.373	0.312	0.069	10.627	0.931	8.535	3.608	0.884	0.942
WB	3444	0.306	32.354	0.217	0.024	13.646	0.976	12.432	5.183	0.954	0.977
NB	1381	0.013	24.306	0.864	0.439	0.694	0.561	0.464	1.303	0.992	0.992
SB	1589	0.018	24.054	0.857	0.970	0.946	0.030	-0.049	1.312	0.898	0.898

CAPACITY ANALYSIS WORKSHEET

DIR	LN GROUP	v	s	v/s	g/C	c	v/c	CRITICAL
EB	LT-TH-RT	1105	2804	0.39	0.60	1675	0.66	*
WB	LT-TH-RT	946	2955	0.32	0.60	1765	0.54	
NB	LT-TH-RT	51	1514	0.03	0.32	491	0.10	
SB	LT-TH-RT	615	1401	0.44	0.32	455	1.35	*

CYCLE= 77.0 LOST= 6.0 SUM V/S CRIT= 0.83 TOTAL V/C= 0.90

LEVEL OF SERVICE WORKSHEET

DIR	LN GROUP	v/c	g/C	C	d1	c	d2	PF	Delay	LOS	Avg Q	95% Q
EB	LT-TH-RT	0.66	0.60	77.0	7.83	1675	0.69	1.00	8.52	B	9.1	9
WB	LT-TH-RT	0.54	0.60	77.0	6.98	1765	0.26	1.00	7.23	B	7.8	8
NB	LT-TH-RT	0.10	0.32	77.0	13.81	491	0.00	1.00	13.81	B	0.7	1
SB	LT-TH-RT	1.35	0.32	77.0	23.78	455	241.93	1.00	265.71	F	49.8	137

DIR	Delay	LOS
EB	8.52	B
WB	7.23	B
NB	13.81	B
SB	265.71	F

INTERSECTION DELAY = 66.37 INTERSECTION LOS=F

THE CYCLE LENGTH WITHIN THE BOUNDS OF 60 TO 120 SECONDS
WHICH MINIMIZES CRITICAL MOVEMENT DELAY IS 60.0 SECONDS

FOR A V/C RATIO OF .95 THE CYCLE SHOULD BE 48.7 SECONDS
for chosen cycle length 60.0
suggested timing phase 1 is 28.4 secs green, 3.0 secs yellow + red clear
suggested timing phase 2 is 25.6 secs green, 3.0 secs yellow + red clear

CINCH PROGRAM VERSION DATE 4-29-1988
1985 HCM - CHAPTER 9: SIGNALIZED - OPERATIONAL ANALYSIS
Rts. 4/ 225 at Shawsheen (#32)
1990 PM Peak Hour
date:08-19-1991 time:08:41:34
LAST DATA SET NAMES LOADED OR SAVED
VOLUME=32pm90 GEOMETRICS=32pm90 SIGNAL=32pm90
LOCATED IN CBD:N
VOLUME & GEOMETRICS

	VOLUMES			# OF LANES			LANE WIDTH			CROSS
DIR	LT	TH	RT	LT	TH	RT	LT	TH	RT	WALK
EB	16	885	13	0	2	0	0.0	8.0	0.0	33
WB	12	728	461	0	2	0	0.0	8.0	0.0	33
NB	25	11	10	0	1	0	0.0	13.5	0.0	27
SB	485	14	33	0	1	0	0.0	11.0	0.0	26

TRAFFIC & ROADWAY CONDITIONS

			ADJ PARK			PEDESTRIANS				ARR
DIR	GRADE	%HV	Y/N	MOVES	BUSES	PHF	CROSS	BUT	MIN TIME	TYPE
EB	3.0%	2.1%	N	0	2	.940	0	N	15.3	3
WB	-3.3%	3.7%	N	0	2	.860	0	N	15.3	3
NB	2.6%	6.5%	N	0	0	.880	0	N	13.8	3
SB	-2.0%	2.1%	N	0	0	.850	0	N	13.8	3

PHASINGS

	EASTBOUND				WESTBOUND				NORTHBOUND				SOUTHBOUND				GREEN	Y+R	PRE/ACT
	l	t	r	p	l	t	r	p	l	t	r	p	l	t	r	p			
1									*	*	*		*	*	*		25.0	3	P
2	*	*	*		*	*	*										46.0	3	P

CYCLE= 77.0

VOLUME ADJUSTMENT WORKSHEET
PART 1 (MOVEMENT ADJUSTMENTS)

DIR	LTV	THV	RTV	PHF	LTFR	THFR	RTFR
EB	16	885	13	.940	17	941	14
WB	12	728	461	.860	14	847	536
NB	25	11	10	.880	28	13	11
SB	485	14	33	.850	571	16	39

PART 2 (LANE GROUP ADJUSTMENTS)

DIR	LN GROUP	FLOW	N	LU	v	Plt	Prt
EB	LT-TH-RT	972	2	1.05	1021	0.02	0.01
WB	LT-TH-RT	1397	2	1.05	1466	0.01	0.38
NB	LT-TH-RT	52	1	1.00	52	0.54	0.22
SB	LT-TH-RT	626	1	1.00	626	0.91	0.06

PART 3 (OPPOSING VOLUME ADJUSTMENTS)

LEFT TURN	OPPOSING APPROACH									
BEING OPPOSED	VOLUMES			% OPPOSING LEFT TURN			# LANES			OPPOSING
	LT	TH	RT	LT	TH	RT	LT	TH	RT	VOLUME
EASTBOUND	14	847	536	100	100	100	0	2	0	1397
WESTBOUND	17	941	14	100	100	100	0	2	0	972
NORTHBOUND	571	16	39	100	100	100	0	1	0	55
SOUTHBOUND	28	13	11	100	100	100	0	1	0	24

SATURATION FLOW ADJUSTMENT WORKSHEET

DIR	LN GROUP	IDEAL	N	Fwid	Fhv	Fgr	Fpark	Fbus	Farea	Frt	Flt	s
EB	LT-TH-RT	1800	2	0.867	0.990	0.985	1.000	0.996	1.000	0.998	0.609	1841
WB	LT-TH-RT	1800	2	0.867	0.982	1.017	1.000	0.996	1.000	0.942	0.685	2003
NB	LT-TH-RT	1800	1	1.050	0.968	0.987	1.000	1.000	1.000	0.871	0.934	1469
SB	LT-TH-RT	1800	1	0.967	0.990	1.010	1.000	1.000	1.000	0.892	0.913	1416

SUPPLEMENTAL WORKSHEET FOR LEFT-TURN ADJUSTMENT FACTOR FLT

INPUT VARIABLES

DIR	C	G	N	Va	Vm	Vlt	Plt	No	Vo	Plto
EB	77	46	2	972	972	17	0.02	2	1397	0.01
WB	77	46	2	1397	1397	14	0.01	2	972	0.02
NB	77	25	1	52	24	28	0.54	1	55	0.91
SB	77	25	1	626	55	571	0.91	1	24	0.54

CALCULATIONS

DIR	Sop	Yo	Gu	Fs	Pl	Gq	Pt	Gf	El	Fm	Flt
EB	3488	0.400	25.303	0.002	0.194	20.697	0.806	7.407	515.977	0.218	0.609
WB	359	1.000	0.000	0.267	0.112	46.000	0.888	14.809	4.209	0.370	0.685
NB	1405	0.039	22.870	0.840	0.543	2.130	0.457	0.951	1.339	0.934	0.934
SB	1520	0.016	24.171	0.860	0.912	0.829	0.088	0.123	1.308	0.913	0.913

CAPACITY ANALYSIS WORKSHEET

DIR	LN GROUP	v	s	v/s	g/C	c	v/c	CRITICAL
EB	LT-TH-RT	1021	1841	0.55	0.60	1100	0.93	
WB	LT-TH-RT	1466	2003	0.73	0.60	1196	1.23	*
NB	LT-TH-RT	52	1469	0.04	0.32	477	0.11	
SB	LT-TH-RT	626	1416	0.44	0.32	460	1.36	*

CYCLE= 77.0 LOST= 6.0 SUM V/S CRIT= 1.17 TOTAL V/C= 1.27

LEVEL OF SERVICE WORKSHEET

DIR	LN GROUP	v/c	g/C	C	d1	c	d2	PF	Delay	LOS	Avg Q	95% Q
EB	LT-TH-RT	0.93	0.60	77.0	10.65	1100	9.65	1.00	20.30	C	9.7	17
WB	LT-TH-RT	1.23	0.60	77.0	17.71	1196	126.06	1.00	143.77	F	61.8	168
NB	LT-TH-RT	0.11	0.32	77.0	13.84	477	0.00	1.00	13.84	B	0.8	1
SB	LT-TH-RT	1.36	0.32	77.0	23.92	460	251.59	1.00	275.51	F	52.4	144

DIR	Delay	LOS
EB	20.30	C
WB	143.77	F
NB	13.84	B
SB	275.51	F

INTERSECTION DELAY =127.85 INTERSECTION LOS=F

THE CYCLE LENGTH WITHIN THE BOUNDS OF 60 TO 120 SECONDS
WHICH MINIMIZES CRITICAL MOVEMENT DELAY IS 120.0 SECONDS

THE V/C RATIO CAN'T BE .95 FOR THE GIVEN CONDITIONS
for chosen cycle length 120.0
suggested timing phase 1 is 42.9 secs green,   3.0 secs yellow + red clear
suggested timing phase 2 is 71.1 secs green,   3.0 secs yellow + red clear

CINCH PROGRAM VERSION DATE 4-29-1988
1985 HCM - CHAPTER 9: SIGNALIZED - OPERATIONAL ANALYSIS
Rts. 4/ 225 at Shawsheen (#32)
1995 pm
date:08-22-1991 time:10:41:31
LAST DATA SET NAMES LOADED OR SAVED
VOLUME=32pm95 GEOMETRICS=32pm90 SIGNAL=32pm90
LOCATED IN CBD:N
VOLUME & GEOMETRICS

	VOLUMES			# OF LANES			LANE WIDTH			CROSS
DIR	LT	TH	RT	LT	TH	RT	LT	TH	RT	WALK
EB	16	946	13	0	2	0	0.0	8.0	0.0	33
WB	12	736	461	0	2	0	0.0	8.0	0.0	33
NB	25	11	10	0	1	0	0.0	13.5	0.0	27
SB	485	14	33	0	1	0	0.0	11.0	0.0	26

TRAFFIC & ROADWAY CONDITIONS

			ADJ PARK			PEDESTRIANS				ARR
DIR	GRADE	%HV	Y/N	MOVES	BUSES	PHF	CROSS	BUT	MIN TIME	TYPE
EB	3.0%	2.1%	N	0	2	.940	0	N	15.3	3
WB	-3.3%	3.7%	N	0	2	.860	0	N	15.3	3
NB	2.6%	6.5%	N	0	0	.880	0	N	13.8	3
SB	-2.0%	2.1%	N	0	0	.850	0	N	13.8	3

PHASINGS

	EASTBOUND				WESTBOUND				NORTHBOUND				SOUTHBOUND				GREEN	Y+R	PRE/ACT
	l	t	r	p	l	t	r	p	l	t	r	p	l	t	r	p			
1									*	*	*		*	*	*		25.0	3	P
2	*	*	*		*	*	*										46.0	3	P

CYCLE= 77.0

VOLUME ADJUSTMENT WORKSHEET
PART 1 (MOVEMENT ADJUSTMENTS)

DIR	LTV	THV	RTV	PHF	LTFR	THFR	RTFR
EB	16	946	13	.940	17	1006	14
WB	12	736	461	.860	14	856	536
NB	25	11	10	.880	28	13	11
SB	485	14	33	.850	571	16	39

PART 2 (LANE GROUP ADJUSTMENTS)

DIR	LN GROUP	FLOW	N	LU	v	Plt	Prt
EB	LT-TH-RT	1037	2	1.05	1089	0.02	0.01
WB	LT-TH-RT	1406	2	1.05	1476	0.01	0.38
NB	LT-TH-RT	52	1	1.00	52	0.54	0.22
SB	LT-TH-RT	626	1	1.00	626	0.91	0.06

PART 3 (OPPOSING VOLUME ADJUSTMENTS)

LEFT TURN	OPPOSING APPROACH									
BEING OPPOSED	VOLUMES			% OPPOSING LEFT TURN			# LANES			OPPOSING
	LT	TH	RT	LT	TH	RT	LT	TH	RT	VOLUME
EASTBOUND	14	856	536	100	100	100	0	2	0	1399
WESTBOUND	17	1006	14	100	100	100	0	2	0	1037
NORTHBOUND	571	16	39	100	100	100	0	1	0	55
SOUTHBOUND	28	13	11	100	100	100	0	1	0	24

SATURATION FLOW ADJUSTMENT WORKSHEET

DIR	LN GROUP	IDEAL	N	Fwid	Fhv	Fgr	Fpark	Fbus	Farea	Frt	Flt	s
EB	LT-TH-RT	1800	2	0.867	0.990	0.985	1.000	0.996	1.000	0.998	0.612	1849
WB	LT-TH-RT	1800	2	0.867	0.982	1.017	1.000	0.996	1.000	0.943	0.686	2006
NB	LT-TH-RT	1800	1	1.050	0.968	0.987	1.000	1.000	1.000	0.871	0.934	1469
SB	LT-TH-RT	1800	1	0.967	0.990	1.010	1.000	1.000	1.000	0.892	0.913	1416

SUPPLEMENTAL WORKSHEET FOR LEFT-TURN ADJUSTMENT FACTOR FLT

INPUT VARIABLES

DIR	C	G	N	Va	Vm	Vlt	Plt	No	Vo	Plto
EB	77	46	2	1037	1037	17	0.02	2	1399	0.01
WB	77	46	2	1406	1399	14	0.01	2	1037	0.02
NB	77	25	1	52	24	28	0.54	1	55	0.91
SB	77	25	1	626	55	571	0.91	1	24	0.54

CALCULATIONS

DIR	Sop	Yo	Gu	Fs	Pl	Gq	Pt	Gf	El	Fm	Flt
EB	3464	0.404	24.996	0.001	0.184	21.004	0.816	7.838	1800.000	0.223	0.612
WB	118	1.000	0.000	0.227	0.111	46.000	0.889	14.900	4.962	0.372	0.686
NB	1405	0.039	22.870	0.840	0.543	2.130	0.457	0.951	1.339	0.934	0.934
SB	1520	0.016	24.171	0.860	0.912	0.829	0.088	0.123	1.308	0.913	0.913

CAPACITY ANALYSIS WORKSHEET

DIR	LN GROUP	v	s	v/s	g/C	c	v/c	CRITICAL
EB	LT-TH-RT	1089	1849	0.59	0.60	1105	0.99	
WB	LT-TH-RT	1476	2006	0.74	0.60	1199	1.23	*
NB	LT-TH-RT	52	1469	0.04	0.32	477	0.11	
SB	LT-TH-RT	626	1416	0.44	0.32	460	1.36	*

CYCLE= 77.0 LOST= 6.0 SUM V/S CRIT= 1.18 TOTAL V/C= 1.28

LEVEL OF SERVICE WORKSHEET

DIR	LN GROUP	v/c	g/C	C	d1	c	d2	PF	Delay	LOS	Avg Q	95% Q
EB	LT-TH-RT	0.99	0.60	77.0	11.54	1105	17.86	1.00	29.39	D	12.9	26
WB	LT-TH-RT	1.23	0.60	77.0	17.95	1199	130.21	1.00	148.16	F	63.9	174
NB	LT-TH-RT	0.11	0.32	77.0	13.84	477	0.00	1.00	13.84	B	0.8	1
SB	LT-TH-RT	1.36	0.32	77.0	23.92	460	251.59	1.00	275.51	F	52.4	144

DIR	Delay	LOS
EB	29.39	D
WB	148.16	F
NB	13.84	B
SB	275.51	F

INTERSECTION DELAY =130.69 INTERSECTION LOS=F

THE CYCLE LENGTH WITHIN THE BOUNDS OF 60 TO 120 SECONDS
WHICH MINIMIZES CRITICAL MOVEMENT DELAY IS 120.0 SECONDS

THE V/C RATIO CAN'T BE .95 FOR THE GIVEN CONDITIONS
for chosen cycle length 120.0
suggested timing phase 1 is 42.8 secs green, 3.0 secs yellow + red clear
suggested timing phase 2 is 71.2 secs green, 3.0 secs yellow + red clear

CINCH PROGRAM VERSION DATE 4-29-1988
1985 HCM - CHAPTER 9: SIGNALIZED - OPERATIONAL ANALYSIS
Rts. 4/ 225 at Shawsheen (#32)
1995 pm b
date:08-22-1991 time:10:44:23
LAST DATA SET NAMES LOADED OR SAVED
VOLUME=32pm95b GEOMETRICS=32pm90 SIGNAL=32pm90
LOCATED IN CBD:N
VOLUME & GEOMETRICS

	VOLUMES			# OF LANES			LANE WIDTH			CROSS
DIR	LT	TH	RT	LT	TH	RT	LT	TH	RT	WALK
EB	16	946	15	0	2	0	0.0	8.0	0.0	33
WB	12	736	465	0	2	0	0.0	8.0	0.0	33
NB	25	11	10	0	1	0	0.0	13.5	0.0	27
SB	487	14	33	0	1	0	0.0	11.0	0.0	26

TRAFFIC & ROADWAY CONDITIONS

			ADJ PARK			PEDESTRIANS				ARR
DIR	GRADE	%HV	Y/N	MOVES	BUSES	PHF	CROSS	BUT	MIN TIME	TYPE
EB	3.0%	2.1%	N	0	2	.940	0	N	15.3	3
WB	-3.3%	3.7%	N	0	2	.860	0	N	15.3	3
NB	2.6%	6.5%	N	0	0	.880	0	N	13.8	3
SB	-2.0%	2.1%	N	0	0	.850	0	N	13.8	3

PHASINGS

	EASTBOUND				WESTBOUND				NORTHBOUND				SOUTHBOUND				GREEN	Y+R	PRE/ACT
	l	t	r	p	l	t	r	p	l	t	r	p	l	t	r	p			
1									*	*	*		*	*	*		25.0	3	P
2	*	*	*		*	*	*										46.0	3	P

CYCLE= 77.0

VOLUME ADJUSTMENT WORKSHEET
PART 1 (MOVEMENT ADJUSTMENTS)

DIR	LTV	THV	RTV	PHF	LTFR	THFR	RTFR
EB	16	946	15	.940	17	1006	16
WB	12	736	465	.860	14	856	541
NB	25	11	10	.880	28	13	11
SB	487	14	33	.850	573	16	39

PART 2 (LANE GROUP ADJUSTMENTS)

DIR	LN GROUP	FLOW	N	LU	v	Plt	Prt
EB	LT-TH-RT	1039	2	1.05	1091	0.02	0.02
WB	LT-TH-RT	1410	2	1.05	1481	0.01	0.38
NB	LT-TH-RT	52	1	1.00	52	0.54	0.22
SB	LT-TH-RT	628	1	1.00	628	0.91	0.06

PART 3 (OPPOSING VOLUME ADJUSTMENTS)

LEFT TURN	OPPOSING APPROACH									
BEING OPPOSED	VOLUMES			% OPPOSING LEFT TURN			# LANES			OPPOSING
	LT	TH	RT	LT	TH	RT	LT	TH	RT	VOLUME
EASTBOUND	14	856	541	100	100	100	0	2	0	1399
WESTBOUND	17	1006	16	100	100	100	0	2	0	1039
NORTHBOUND	573	16	39	100	100	100	0	1	0	55
SOUTHBOUND	28	13	11	100	100	100	0	1	0	24

SATURATION FLOW ADJUSTMENT WORKSHEET

DIR	LN GROUP	IDEAL	N	Fwid	Fhv	Fgr	Fpark	Fbus	Farea	Frt	Flt	s
EB	LT-TH-RT	1800	2	0.867	0.990	0.985	1.000	0.996	1.000	0.998	0.612	1849
WB	LT-TH-RT	1800	2	0.867	0.982	1.017	1.000	0.996	1.000	0.942	0.687	2007
NB	LT-TH-RT	1800	1	1.050	0.968	0.987	1.000	1.000	1.000	0.871	0.934	1469
SB	LT-TH-RT	1800	1	0.967	0.990	1.010	1.000	1.000	1.000	0.892	0.913	1415

SUPPLEMENTAL WORKSHEET FOR LEFT-TURN ADJUSTMENT FACTOR FLT

INPUT VARIABLES

DIR	C	G	N	Va	Vm	Vlt	Plt	No	Vo	Plto
EB	77	46	2	1039	1039	17	0.02	2	1399	0.01
WB	77	46	2	1410	1399	14	0.01	2	1039	0.02
NB	77	25	1	52	24	28	0.54	1	55	0.91
SB	77	25	1	628	55	573	0.91	1	24	0.54

CALCULATIONS

DIR	Sop	Yo	Gu	Fs	Pl	Gq	Pt	Gf	El	Fm	Flt
EB	3463	0.404	24.991	0.001	0.183	21.009	0.817	7.853	1800.000	0.224	0.612
WB	118	1.000	0.000	0.225	0.111	46.000	0.889	14.946	4.991	0.373	0.687
NB	1405	0.039	22.870	0.840	0.543	2.130	0.457	0.951	1.339	0.934	0.934
SB	1520	0.016	24.171	0.860	0.912	0.829	0.088	0.123	1.308	0.913	0.913

CAPACITY ANALYSIS WORKSHEET

DIR	LN GROUP	v	s	v/s	g/C	c	v/c	CRITICAL
EB	LT-TH-RT	1091	1849	0.59	0.60	1105	0.99	
WB	LT-TH-RT	1481	2007	0.74	0.60	1199	1.24	*
NB	LT-TH-RT	52	1469	0.04	0.32	477	0.11	
SB	LT-TH-RT	628	1415	0.44	0.32	460	1.37	*

CYCLE= 77.0 LOST= 6.0 SUM V/S CRIT= 1.18 TOTAL V/C= 1.28

LEVEL OF SERVICE WORKSHEET

DIR	LN GROUP	v/c	g/C	C	d1	c	d2	PF	Delay	LOS	Avg Q	95% Q
EB	LT-TH-RT	0.99	0.60	77.0	11.57	1105	18.26	1.00	29.84	D	13.1	27
WB	LT-TH-RT	1.24	0.60	77.0	18.09	1199	132.78	1.00	150.87	F	65.2	178
NB	LT-TH-RT	0.11	0.32	77.0	13.84	477	0.00	1.00	13.84	B	0.8	1
SB	LT-TH-RT	1.37	0.32	77.0	23.99	460	256.66	1.00	280.65	F	53.5	148

DIR	Delay	LOS
EB	29.84	D
WB	150.87	F
NB	13.84	B
SB	280.65	F

INTERSECTION DELAY =133.13 INTERSECTION LOS=F

THE CYCLE LENGTH WITHIN THE BOUNDS OF 60 TO 120 SECONDS
WHICH MINIMIZES CRITICAL MOVEMENT DELAY IS 120.0 SECONDS

THE V/C RATIO CAN'T BE .95 FOR THE GIVEN CONDITIONS
for chosen cycle length 120.0
suggested timing phase 1 is 42.8 secs green, 3.0 secs yellow + red clear
suggested timing phase 2 is 71.2 secs green, 3.0 secs yellow + red clear

CINCH PROGRAM VERSION DATE 4-29-1988
1985 HCM - CHAPTER 9: SIGNALIZED - OPERATIONAL ANALYSIS
Great Rd./South Rd.
AM Peak Hour
date:02-18-1992 time:11:59:47
LAST DATA SET NAMES LOADED OR SAVED
VOLUME=28am90 GEOMETRICS=28am90 SIGNAL=28am90
LOCATED IN CBD:N
VOLUME & GEOMETRICS

	VOLUMES			# OF LANES			LANE WIDTH			CROSS
DIR	LT	TH	RT	LT	TH	RT	LT	TH	RT	WALK
EB	59	852	105	1	1	0	8.0	8.0	0.0	54
WB	17	426	8	1	1	0	10.0	10.0	0.0	51
NB	144	41	42	1	1	0	10.2	12.0	0.0	38
SB	153	296	43	0	1	0	0.0	12.5	0.0	27

TRAFFIC & ROADWAY CONDITIONS

			ADJ PARK			PEDESTRIANS				ARR
DIR	GRADE	%HV	Y/N	MOVES	BUSES	PHF	CROSS	BUT	MIN TIME	TYPE
EB	0.0%	1.0%	Y	0	0	.870	0	Y	20.5	3
WB	3.0%	14.0%	N	0	0	.960	0	Y	20.5	3
NB	0.0%	18.0%	Y	0	2	.850	0	Y	16.5	3
SB	0.0%	2.0%	N	0	0	.900	0	Y	16.5	3

PHASINGS

	EASTBOUND				WESTBOUND				NORTHBOUND				SOUTHBOUND				GREEN	Y+R	PRE/ACT
	l	t	r	p	l	t	r	p	l	t	r	p	l	t	r	p			
1	*	*	*		*	*	*										52.0	3	P
2									*	*	*		*	*	*		32.0	3	P

CYCLE= 90.0

VOLUME ADJUSTMENT WORKSHEET
PART 1 (MOVEMENT ADJUSTMENTS)

DIR	LTV	THV	RTV	PHF	LTFR	THFR	RTFR
EB	59	852	105	.870	68	979	121
WB	17	426	8	.960	18	444	8
NB	144	41	42	.850	169	48	49
SB	153	296	43	.900	170	329	48

PART 2 (LANE GROUP ADJUSTMENTS)

DIR	LN GROUP	FLOW	N	LU	v	Plt	Prt
EB	LT	68	1	1.00	68	1.00	0.00
EB	TH-RT	1100	1	1.00	1100	0.00	0.11
WB	LT	18	1	1.00	18	1.00	0.00
WB	TH-RT	452	1	1.00	452	0.00	0.02
NB	LT	169	1	1.00	169	1.00	0.00
NB	TH-RT	98	1	1.00	98	0.00	0.51
SB	LT-TH-RT	547	1	1.00	547	0.31	0.09

PART 3 (OPPOSING VOLUME ADJUSTMENTS)

LEFT TURN	OPPOSING APPROACH									
BEING OPPOSED	VOLUMES			% OPPOSING LEFT TURN			# LANES			OPPOSING
	LT	TH	RT	LT	TH	RT	LT	TH	RT	VOLUME
EASTBOUND	18	444	8	100	100	100	1	1	0	452
WESTBOUND	68	979	121	100	100	100	1	1	0	1100
NORTHBOUND	170	329	48	100	100	100	0	1	0	377
SOUTHBOUND	169	48	49	100	100	100	1	1	0	98

SATURATION FLOW ADJUSTMENT WORKSHEET

DIR	LN GROUP	IDEAL	N	Fwid	Fhv	Fgr	Fpark	Fbus	Farea	Frt	Flt	s
EB	LT	1800	1	0.867	0.995	1.000	1.000	1.000	1.000	1.000	0.474	736
EB	TH-RT	1800	1	0.867	0.995	1.000	1.000	1.000	1.000	0.984	1.000	1527
WB	LT	1800	1	0.933	0.935	0.985	1.000	1.000	1.000	1.000	0.077	119
WB	TH-RT	1800	1	0.933	0.935	0.985	1.000	1.000	1.000	0.997	1.000	1542
NB	LT	1800	1	0.939	0.917	1.000	1.000	1.000	1.000	1.000	0.379	587
NB	TH-RT	1800	1	1.000	0.917	1.000	1.000	0.992	1.000	0.924	1.000	1513
SB	LT-TH-RT	1800	1	1.017	0.990	1.000	1.000	1.000	1.000	0.888	0.947	1524

SUPPLEMENTAL WORKSHEET FOR LEFT-TURN ADJUSTMENT FACTOR FLT

INPUT VARIABLES

DIR	C	G	N	Va	Vm	Vlt	Plt	No	Vo	Plto
EB	90	52	1	68	1100	68	1.00	1	452	0.00
WB	90	52	1	18	452	18	1.00	1	1100	0.00
NB	90	32	1	169	98	169	1.00	1	377	0.31
SB	90	32	1	547	377	170	0.31	1	98	0.00

CALCULATIONS

DIR	Sop	Yo	Gu	Fs	Pl	Gq	Pt	Gf	El	Fm	Flt
EB	1800	0.251	39.255	0.592	1.000	12.745	0.000	0.000	1.899	0.474	0.474
WB	1800	0.611	0.000	0.188	1.000	52.000	0.000	0.000	6.000	0.077	0.077
NB	1609	0.234	14.270	0.640	1.000	17.730	0.000	0.000	1.759	0.379	0.379
SB	1800	0.054	28.673	0.814	0.311	3.327	0.689	2.047	1.382	0.947	0.947

CAPACITY ANALYSIS WORKSHEET

DIR	LN GROUP	v	s	v/s	g/C	c	v/c	CRITICAL
EB	LT	68	736	0.09	0.58	426	0.16	
EB	TH-RT	1100	1527	0.72	0.58	882	1.25	*
WB	LT	18	119	0.15	0.58	69	0.26	
WB	TH-RT	452	1542	0.29	0.58	891	0.51	
NB	LT	169	587	0.29	0.36	209	0.81	
NB	TH-RT	98	1513	0.06	0.36	538	0.18	
SB	LT-TH-RT	547	1524	0.36	0.36	542	1.01	*

CYCLE= 90.0 LOST= 6.0 SUM V/S CRIT= 1.08 TOTAL V/C= 1.16

LEVEL OF SERVICE WORKSHEET

DIR	LN GROUP	v/c	g/C	C	d1	c	d2	PF	Delay	LOS	Avg Q	95% Q
EB	LT	0.16	0.58	90.0	6.72	426	0.02	1.00	6.73	B	0.7	1
EB	TH-RT	1.25	0.58	90.0	21.81	882	144.27	1.00	166.09	F	56.6	153
WB	LT	0.26	0.58	90.0	7.16	69	0.45	1.00	7.61	B	0.2	1
WB	TH-RT	0.51	0.58	90.0	8.63	891	0.41	1.00	9.03	B	4.8	5
NB	LT	0.81	0.36	90.0	19.97	209	14.20	1.00	34.17	D	3.0	6
NB	TH-RT	0.18	0.36	90.0	15.18	538	0.02	1.00	15.20	C	1.6	2
SB	LT-TH-RT	1.01	0.36	90.0	22.15	542	32.06	1.00	54.21	E	12.6	26

DIR	Delay	LOS
EB	156.83	F
WB	8.98	B
NB	27.24	D
SB	54.21	E

INTERSECTION DELAY = 91.49 INTERSECTION LOS=F

THE CYCLE LENGTH WITHIN THE BOUNDS OF 60 TO 120 SECONDS
WHICH MINIMIZES CRITICAL MOVEMENT DELAY IS 90.0 SECONDS

THE V/C RATIO CAN'T BE .95 FOR THE GIVEN CONDITIONS
for chosen cycle length 90.0
suggested timing phase 1 is 56.1 secs green, 3.0 secs yellow + red clear
suggested timing phase 2 is 27.9 secs green, 3.0 secs yellow + red clear

CINCH PROGRAM VERSION DATE 4-29-1988
1985 HCM - CHAPTER 9: SIGNALIZED - OPERATIONAL ANALYSIS
Great Rd./South Rd.
am 1995 no-build
date:02-18-1992 time:13:00:12
LAST DATA SET NAMES LOADED OR SAVED
VOLUME=28am95 GEOMETRICS=28am95 SIGNAL=28am95o
LOCATED IN CBD:n
VOLUME & GEOMETRICS

	VOLUMES			# OF LANES			LANE WIDTH			CROSS
DIR	LT	TH	RT	LT	TH	RT	LT	TH	RT	WALK
EB	51	960	104	1	1	0	8.0	8.0	0.0	54
WB	11	468	9	1	1	0	10.0	10.0	0.0	51
NB	111	38	42	1	1	0	10.2	12.0	0.0	38
SB	114	219	43	0	1	0	0.0	12.5	0.0	27

TRAFFIC & ROADWAY CONDITIONS

			ADJ PARK			PEDESTRIANS				ARR
DIR	GRADE	%HV	Y/N	MOVES	BUSES	PHF	CROSS	BUT	MIN TIME	TYPE
EB	0.0%	1.0%	Y	0	0	.940	10	Y	20.5	3
WB	3.0%	3.0%	N	0	0	.920	10	Y	20.5	3
NB	0.0%	2.0%	Y	0	0	.940	10	Y	16.5	3
SB	0.0%	1.0%	N	0	0	.850	10	Y	16.5	3

PHASINGS

	EASTBOUND				WESTBOUND				NORTHBOUND				SOUTHBOUND				GREEN	Y+R	PRE/ACT
	l	t	r	p	l	t	r	p	l	t	r	p	l	t	r	p			
1	*	*	*		*	*	*										81.6	3	P
2									*	*	*		*	*	*		32.4	3	P

CYCLE= 120.0

VOLUME ADJUSTMENT WORKSHEET
PART 1 (MOVEMENT ADJUSTMENTS)

DIR	LTV	THV	RTV	PHF	LTFR	THFR	RTFR
EB	51	960	104	.940	54	1021	111
WB	11	468	9	.920	12	509	10
NB	111	38	42	.940	118	40	45
SB	114	219	43	.850	134	258	51

PART 2 (LANE GROUP ADJUSTMENTS)

DIR	LN GROUP	FLOW	N	LU	v	Plt	Prt
EB	LT	54	1	1.00	54	1.00	0.00
EB	TH-RT	1132	1	1.00	1132	0.00	0.10
WB	LT	12	1	1.00	12	1.00	0.00
WB	TH-RT	518	1	1.00	518	0.00	0.02
NB	LT	118	1	1.00	118	1.00	0.00
NB	TH-RT	85	1	1.00	85	0.00	0.53
SB	LT-TH-RT	442	1	1.00	442	0.30	0.11

PART 3 (OPPOSING VOLUME ADJUSTMENTS)

LEFT TURN BEING OPPOSED	OPPOSING APPROACH VOLUMES			% OPPOSING LEFT TURN			# LANES			OPPOSING
	LT	TH	RT	LT	TH	RT	LT	TH	RT	VOLUME
EASTBOUND	12	509	10	100	100	100	1	1	0	518
WESTBOUND	54	1021	111	100	100	100	1	1	0	1132
NORTHBOUND	134	258	51	100	100	100	0	1	0	308
SOUTHBOUND	118	40	45	100	100	100	1	1	0	85

SATURATION FLOW ADJUSTMENT WORKSHEET

DIR	LN GROUP	IDEAL	N	Fwid	Fhv	Fgr	Fpark	Fbus	Farea	Frt	Flt	s
EB	LT	1800	1	0.867	0.995	1.000	1.000	1.000	1.000	1.000	0.446	692
EB	TH-RT	1800	1	0.867	0.995	1.000	1.000	1.000	1.000	0.985	1.000	1529
WB	LT	1800	1	0.933	0.985	0.985	1.000	1.000	1.000	1.000	0.079	129
WB	TH-RT	1800	1	0.933	0.985	0.985	1.000	1.000	1.000	0.997	1.000	1626
NB	LT	1800	1	0.939	0.990	1.000	1.000	1.000	1.000	1.000	0.344	575
NB	TH-RT	1800	1	1.000	0.990	1.000	1.000	1.000	1.000	0.921	1.000	1642
SB	LT-TH-RT	1800	1	1.017	0.995	1.000	1.000	1.000	1.000	0.884	0.936	1507

SUPPLEMENTAL WORKSHEET FOR LEFT-TURN ADJUSTMENT FACTOR FLT

INPUT VARIABLES

DIR	C	G	N	Va	Vm	Vlt	Plt	No	Vo	Plto
EB	120	82	1	54	1132	54	1.00	1	518	0.00
WB	120	82	1	12	518	12	1.00	1	1132	0.00
NB	120	32	1	118	85	118	1.00	1	308	0.30
SB	120	32	1	442	308	134	0.30	1	85	0.00

CALCULATIONS

DIR	Sop	Yo	Gu	Fs	Pl	Gq	Pt	Gf	El	Fm	Flt
EB	1800	0.288	66.107	0.551	1.000	15.524	0.000	0.000	2.042	0.446	0.446
WB	1800	0.629	16.622	0.168	1.000	65.008	0.000	0.000	6.714	0.079	0.079
NB	1619	0.190	11.761	0.682	1.000	20.608	0.000	0.000	1.649	0.344	0.344
SB	1800	0.047	28.021	0.822	0.303	4.349	0.697	2.501	1.369	0.936	0.936

CAPACITY ANALYSIS WORKSHEET

DIR	LN GROUP	v	s	v/s	g/C	c	v/c	CRITICAL
EB	LT	54	692	0.08	0.68	471	0.12	
EB	TH-RT	1132	1529	0.74	0.68	1040	1.09	*
WB	LT	12	129	0.09	0.68	88	0.14	
WB	TH-RT	518	1626	0.32	0.68	1106	0.47	
NB	LT	118	575	0.21	0.27	155	0.76	
NB	TH-RT	85	1642	0.05	0.27	443	0.19	
SB	LT-TH-RT	442	1507	0.29	0.27	407	1.09	*

CYCLE=120.0 LOST= 6.0 SUM V/S CRIT= 1.03 TOTAL V/C= 1.09

LEVEL OF SERVICE WORKSHEET

DIR	LN GROUP	v/c	g/C	C	d1	c	d2	PF	Delay	LOS	Avg Q	95% Q
EB	LT	0.12	0.68	120.0	5.06	471	0.01	1.00	5.06	B	0.6	
EB	TH-RT	1.09	0.68	120.0	17.94	1040	50.03	1.00	67.96	F	27.4	
WB	LT	0.14	0.68	120.0	5.14	88	0.05	1.00	5.18	B	0.1	
WB	TH-RT	0.47	0.68	120.0	6.85	1106	0.24	1.00	7.09	B	5.5	
NB	LT	0.76	0.27	120.0	30.60	155	12.93	1.00	43.52	E	2.9	
NB	TH-RT	0.19	0.27	120.0	25.65	443	0.03	1.00	25.67	D	2.1	
SB	LT-TH-RT	1.09	0.27	120.0	34.42	407	64.07	1.00	98.49	F	17.5	

DIR	Delay	LOS
EB	65.09	F
WB	7.04	B
NB	36.05	D
SB	98.49	F

INTERSECTION DELAY = 55.81 INTERSECTION LOS=E

THE CYCLE LENGTH WITHIN THE BOUNDS OF 60 TO 120 SECONDS
WHICH MINIMIZES CRITICAL MOVEMENT DELAY IS 120.0 SECONDS

THE V/C RATIO CAN'T BE .95 FOR THE GIVEN CONDITIONS
THE EXISTING TIMING IS OPTIMAL

CINCH PROGRAM VERSION DATE 4-29-1988
1985 HCM - CHAPTER 9: SIGNALIZED - OPERATIONAL ANALYSIS
Great Rd./South Rd.
am 1995 b
date:02-18-1992 time:12:46:36
LAST DATA SET NAMES LOADED OR SAVED
VOLUME=28am95b GEOMETRICS=28am95b SIGNAL=28am95b
LOCATED IN CBD:N
VOLUME & GEOMETRICS

	VOLUMES			# OF LANES			LANE WIDTH			CROSS
DIR	LT	TH	RT	LT	TH	RT	LT	TH	RT	WALK
EB	51	968	112	1	1	0	8.0	8.0	0.0	54
WB	11	468	9	1	1	0	10.0	10.0	0.0	51
NB	111	40	42	1	1	0	10.2	12.0	0.0	38
SB	114	226	43	0	1	0	0.0	12.5	0.0	27

TRAFFIC & ROADWAY CONDITIONS

			ADJ PARK			PEDESTRIANS				ARR
DIR	GRADE	%HV	Y/N	MOVES	BUSES	PHF	CROSS	BUT	MIN TIME	TYPE
EB	0.0%	1.0%	Y	0	0	.940	10	Y	20.5	3
WB	3.0%	3.0%	N	0	0	.920	10	Y	20.5	3
NB	0.0%	2.0%	Y	0	0	.940	10	Y	16.5	3
SB	0.0%	1.0%	N	0	0	.850	10	Y	16.5	3

PHASINGS

	EASTBOUND				WESTBOUND				NORTHBOUND				SOUTHBOUND				GREEN	Y+R	PRE/ACT
	l	t	r	p	l	t	r	p	l	t	r	p	l	t	r	p			
1	*	*	*		*	*	*										81.6	3	P
2									*	*	*		*	*	*		32.4	3	P

CYCLE= 120.0

VOLUME ADJUSTMENT WORKSHEET
PART 1 (MOVEMENT ADJUSTMENTS)

DIR	LTV	THV	RTV	PHF	LTFR	THFR	RTFR
EB	51	968	112	.940	54	1030	119
WB	11	468	9	.920	12	509	10
NB	111	40	42	.940	118	43	45
SB	114	226	43	.850	134	266	51

PART 2 (LANE GROUP ADJUSTMENTS)

DIR	LN GROUP	FLOW	N	LU	v	Plt	Prt
EB	LT	54	1	1.00	54	1.00	0.00
EB	TH-RT	1149	1	1.00	1149	0.00	0.10
WB	LT	12	1	1.00	12	1.00	0.00
WB	TH-RT	518	1	1.00	518	0.00	0.02
NB	LT	118	1	1.00	118	1.00	0.00
NB	TH-RT	87	1	1.00	87	0.00	0.51
SB	LT-TH-RT	451	1	1.00	451	0.30	0.11

PART 3 (OPPOSING VOLUME ADJUSTMENTS)

LEFT TURN	OPPOSING APPROACH									
BEING OPPOSED	VOLUMES			% OPPOSING LEFT TURN			# LANES			OPPOSING
	LT	TH	RT	LT	TH	RT	LT	TH	RT	VOLUME
EASTBOUND	12	509	10	100	100	100	1	1	0	518
WESTBOUND	54	1030	119	100	100	100	1	1	0	1149
NORTHBOUND	134	266	51	100	100	100	0	1	0	316
SOUTHBOUND	118	43	45	100	100	100	1	1	0	87

SATURATION FLOW ADJUSTMENT WORKSHEET

DIR	LN GROUP	IDEAL	N	Fwid	Fhv	Fgr	Fpark	Fbus	Farea	Frt	Flt	s
EB	LT	1800	1	0.867	0.995	1.000	1.000	1.000	1.000	1.000	0.445	691
EB	TH-RT	1800	1	0.867	0.995	1.000	1.000	1.000	1.000	0.984	1.000	1528
WB	LT	1800	1	0.933	0.985	0.985	1.000	1.000	1.000	1.000	0.073	118
WB	TH-RT	1800	1	0.933	0.985	0.985	1.000	1.000	1.000	0.997	1.000	1626
NB	LT	1800	1	0.939	0.990	1.000	1.000	1.000	1.000	1.000	0.331	554
NB	TH-RT	1800	1	1.000	0.990	1.000	1.000	1.000	1.000	0.923	1.000	1645
SB	LT-TH-RT	1800	1	1.017	0.995	1.000	1.000	1.000	1.000	0.884	0.936	1507

SUPPLEMENTAL WORKSHEET FOR LEFT-TURN ADJUSTMENT FACTOR FLT

INPUT VARIABLES

DIR	C	G	N	Va	Vm	Vlt	Plt	No	Vo	Plto
EB	120	82	1	54	1149	54	1.00	1	518	0.00
WB	120	82	1	12	518	12	1.00	1	1149	0.00
NB	120	32	1	118	87	118	1.00	1	316	0.30
SB	120	32	1	451	316	134	0.30	1	87	0.00

CALCULATIONS

DIR	Sop	Yo	Gu	Fs	Pl	Gq	Pt	Gf	El	Fm	Flt
EB	1800	0.288	66.020	0.551	1.000	15.549	0.000	0.000	2.042	0.445	0.445
WB	1800	0.638	13.748	0.157	1.000	67.820	0.000	0.000	7.169	0.073	0.073
NB	1621	0.195	11.187	0.677	1.000	21.245	0.000	0.000	1.661	0.331	0.331
SB	1800	0.048	27.971	0.820	0.298	4.460	0.702	2.573	1.371	0.936	0.936

CAPACITY ANALYSIS WORKSHEET

DIR	LN GROUP	v	s	v/s	g/C	c	v/c	CRITICAL
EB	LT	54	691	0.08	0.68	470	0.12	
EB	TH-RT	1149	1528	0.75	0.68	1039	1.11	*
WB	LT	12	118	0.10	0.68	80	0.15	
WB	TH-RT	518	1626	0.32	0.68	1105	0.47	
NB	LT	118	554	0.21	0.27	150	0.79	
NB	TH-RT	87	1645	0.05	0.27	445	0.20	
SB	LT-TH-RT	451	1507	0.30	0.27	407	1.11	*

CYCLE=120.0 LOST= 6.0 SUM V/S CRIT= 1.05 TOTAL V/C= 1.11

LEVEL OF SERVICE WORKSHEET

DIR	LN GROUP	v/c	g/C	C	d1	c	d2	PF	Delay	LOS	Avg Q	95% Q
EB	LT	0.12	0.68	120.0	5.08	470	0.01	1.00	5.08	B	0.6	1
EB	TH-RT	1.11	0.68	120.0	18.85	1039	58.07	1.00	76.92	F	30.7	75
WB	LT	0.15	0.68	120.0	5.20	80	0.07	1.00	5.27	B	0.1	1
WB	TH-RT	0.47	0.68	120.0	6.87	1105	0.24	1.00	7.11	B	5.5	6
NB	LT	0.79	0.27	120.0	30.87	150	15.95	1.00	46.82	E	3.0	5
NB	TH-RT	0.20	0.27	120.0	25.64	445	0.03	1.00	25.67	D	2.1	3
SB	LT-TH-RT	1.11	0.27	120.0	34.64	407	71.98	1.00	106.62	F	18.8	41

DIR	Delay	LOS
EB	73.68	F
WB	7.07	B
NB	37.83	D
SB	106.62	F

INTERSECTION DELAY = 62.03 INTERSECTION LOS=F

THE CYCLE LENGTH WITHIN THE BOUNDS OF 60 TO 120 SECONDS
WHICH MINIMIZES CRITICAL MOVEMENT DELAY IS 120.0 SECONDS

THE V/C RATIO CAN'T BE .95 FOR THE GIVEN CONDITIONS
THE EXISTING TIMING IS OPTIMAL

CINCH PROGRAM VERSION DATE 4-29-1988
1985 HCM - CHAPTER 9: SIGNALIZED - OPERATIONAL ANALYSIS
Great Rd./South Rd (#28)
1990 PM Peak Hour
date:02-18-1992 time:12:05:20
LAST DATA SET NAMES LOADED OR SAVED
VOLUME=b4p GEOMETRICS=28pm90 SIGNAL=28pm90
LOCATED IN CBD:N
VOLUME & GEOMETRICS

	VOLUMES			# OF LANES			LANE WIDTH			CROSS
DIR	LT	TH	RT	LT	TH	RT	LT	TH	RT	WALK
EB	21	557	37	1	1	0	8.0	8.0	0.0	54
WB	8	796	11	1	1	0	10.0	10.0	0.0	51
NB	383	189	47	1	1	0	10.2	12.0	0.0	38
SB	53	51	264	0	1	0	0.0	12.5	0.0	27

TRAFFIC & ROADWAY CONDITIONS

			ADJ PARK			PEDESTRIANS				ARR
DIR	GRADE	%HV	Y/N	MOVES	BUSES	PHF	CROSS	BUT	MIN TIME	TYPE
EB	0.0%	1.0%	Y	0	0	.940	10	Y	20.5	3
WB	3.0%	3.0%	N	0	0	.920	10	Y	20.5	3
NB	0.0%	2.0%	Y	0	0	.940	10	Y	16.5	3
SB	0.0%	1.0%	N	0	0	.850	10	Y	16.5	3

PHASINGS

	EASTBOUND				WESTBOUND				NORTHBOUND				SOUTHBOUND				GREEN	Y+R	PRE/ACT
	l	t	r	p	l	t	r	p	l	t	r	p	l	t	r	p			
1	*	*	*		*	*	*			*					*		52.0	3	P
2				*				*				*				*	0.0	2	A
3			*				*		*	*	*		*	*	*		32.0	3	P

CYCLE= 92.0

VOLUME ADJUSTMENT WORKSHEET
PART 1 (MOVEMENT ADJUSTMENTS)

DIR	LTV	THV	RTV	PHF	LTFR	THFR	RTFR
EB	21	557	37	.940	22	593	39
WB	8	796	11	.920	9	865	12
NB	383	189	47	.940	407	201	50
SB	53	51	264	.850	62	60	311

PART 2 (LANE GROUP ADJUSTMENTS)

DIR	LN GROUP	FLOW	N	LU	v	Plt	Prt
EB	LT	22	1	1.00	22	1.00	0.00
EB	TH-RT	632	1	1.00	632	0.00	0.06
WB	LT	9	1	1.00	9	1.00	0.00
WB	TH-RT	877	1	1.00	877	0.00	0.01
NB	LT	407	1	1.00	407	1.00	0.00
NB	TH-RT	251	1	1.00	251	0.00	0.20
SB	LT-TH-RT	433	1	1.00	433	0.14	0.72

PART 3 (OPPOSING VOLUME ADJUSTMENTS)

LEFT TURN	OPPOSING APPROACH									
BEING OPPOSED	VOLUMES			% OPPOSING LEFT TURN			# LANES			OPPOSING
	LT	TH	RT	LT	TH	RT	LT	TH	RT	VOLUME
EASTBOUND	9	865	12	100	100	60	1	1	0	872
WESTBOUND	22	593	39	100	100	60	1	1	0	616
NORTHBOUND	62	60	311	100	100	37	0	1	0	174
SOUTHBOUND	407	201	50	100	100	37	1	1	0	219

SATURATION FLOW ADJUSTMENT WORKSHEET

DIR	LN GROUP	IDEAL	N	Fwid	Fhv	Fgr	Fpark	Fbus	Farea	Frt	Flt	s
EB	LT	1800	1	0.867	0.995	1.000	1.000	1.000	1.000	1.000	0.158	245
EB	TH-RT	1800	1	0.867	0.995	1.000	1.000	1.000	1.000	0.991	1.000	1538
WB	LT	1800	1	0.933	0.985	0.985	1.000	1.000	1.000	1.000	0.338	551
WB	TH-RT	1800	1	0.933	0.985	0.985	1.000	1.000	1.000	0.998	1.000	1627
NB	LT	1800	1	0.939	0.990	1.000	1.000	1.000	1.000	1.000	0.646	1081
NB	TH-RT	1800	1	1.000	0.990	1.000	1.000	1.000	1.000	0.970	1.000	1729
SB	LT-TH-RT	1800	1	1.017	0.995	1.000	1.000	1.000	1.000	0.800	0.936	1363

SUPPLEMENTAL WORKSHEET FOR LEFT-TURN ADJUSTMENT FACTOR FLT

INPUT VARIABLES

DIR	C	G	N	Va	Vm	Vlt	Plt	No	Vo	Plto
EB	92	52	1	22	632	22	1.00	1	872	0.00
WB	92	52	1	9	877	9	1.00	1	616	0.00
NB	92	32	1	407	251	407	1.00	1	174	0.26
SB	92	32	1	433	371	62	0.14	1	219	0.00

CALCULATIONS

DIR	Sop	Yo	Gu	Fs	Pl	Gq	Pt	Gf	El	Fm	Flt
EB	1800	0.485	14.383	0.330	1.000	37.617	0.000	0.000	3.411	0.158	0.158
WB	1800	0.342	31.185	0.490	1.000	20.815	0.000	0.000	2.296	0.338	0.338
NB	1566	0.111	24.489	0.766	1.000	7.511	0.000	0.000	1.468	0.646	0.646
SB	1800	0.122	23.669	0.738	0.144	8.331	0.856	5.667	1.525	0.936	0.936

CAPACITY ANALYSIS WORKSHEET

DIR	LN GROUP	v	s	v/s	g/C	c	v/c	CRITICAL
EB	LT	22	245	0.09	0.57	139	0.16	
EB	TH-RT	632	1538	0.41	0.57	869	0.73	
WB	LT	9	551	0.02	0.57	312	0.03	
WB	TH-RT	877	1627	0.54	0.57	920	0.95	*
NB	LT	407	1081	0.38	0.35	376	1.08	*
NB	TH-RT	251	1729	0.15	0.35	601	0.42	
SB	LT-TH-RT	433	1363	0.32	0.35	474	0.91	

CYCLE= 92.0 LOST= 8.0 SUM V/S CRIT= 0.92 TOTAL V/C= 1.00

LEVEL OF SERVICE WORKSHEET

DIR	LN GROUP	v/c	g/C	C	d1	c	d2	PF	Delay	LOS	Avg Q	95% Q
EB	LT	0.16	0.57	92.0	7.27	139	0.05	1.00	7.32	B	0.2	1
EB	TH-RT	0.73	0.57	92.0	11.22	869	2.15	1.00	13.37	B	7.0	8
WB	LT	0.03	0.57	92.0	6.71	312	0.00	1.00	6.71	B	0.1	1
WB	TH-RT	0.95	0.57	92.0	14.34	920	14.27	1.00	28.61	D	11.8	22
NB	LT	1.08	0.35	92.0	23.87	376	63.85	1.00	87.71	F	13.3	31
NB	TH-RT	0.42	0.35	92.0	17.40	601	0.29	1.00	17.68	C	4.2	5
SB	LT-TH-RT	0.91	0.35	92.0	21.79	474	15.69	1.00	37.48	D	8.1	14

DIR	Delay	LOS
EB	13.16	B
WB	28.40	D
NB	61.01	F
SB	37.48	D

INTERSECTION DELAY = 34.26 INTERSECTION LOS=D

THE CYCLE LENGTH WITHIN THE BOUNDS OF 60 TO 120 SECONDS
WHICH MINIMIZES CRITICAL MOVEMENT DELAY IS 90.0 SECONDS

FOR A V/C RATIO OF .95 THE CYCLE SHOULD BE 224.1 SECONDS
for chosen cycle length 90.0
suggested timing phase 1 is 48.3 secs green, 3.0 secs yellow + red clear
suggested timing phase 2 is 0.0 secs green, 2.0 secs yellow + red clear

CINCH PROGRAM VERSION DATE 4-29-1988
1985 HCM - CHAPTER 9: SIGNALIZED - OPERATIONAL ANALYSIS
Great Rd./South Rd (#28)
1995 PM Peak nb
date:02-18-1992 time:12:08:43
LAST DATA SET NAMES LOADED OR SAVED
VOLUME=28pm95 GEOMETRICS=28pm95b SIGNAL=28pm95
LOCATED IN CBD:N
VOLUME & GEOMETRICS

	VOLUMES			# OF LANES			LANE WIDTH			CROSS
DIR	LT	TH	RT	LT	TH	RT	LT	TH	RT	WALK
EB	21	610	37	1	1	0	8.0	8.0	0.0	54
WB	8	923	9	1	1	0	10.0	10.0	0.0	51
NB	383	189	47	1	1	0	10.2	12.0	0.0	38
SB	53	51	264	0	1	0	0.0	12.5	0.0	27

TRAFFIC & ROADWAY CONDITIONS

			ADJ PARK			PEDESTRIANS				ARR
DIR	GRADE	%HV	Y/N	MOVES	BUSES	PHF	CROSS	BUT	MIN TIME	TYPE
EB	0.0%	1.0%	Y	0	0	.940	10	Y	20.5	3
WB	3.0%	3.0%	N	0	0	.920	10	Y	20.5	3
NB	0.0%	2.0%	Y	0	0	.940	10	Y	16.5	3
SB	0.0%	1.0%	N	0	0	.850	10	Y	16.5	3

PHASINGS

	EASTBOUND				WESTBOUND				NORTHBOUND				SOUTHBOUND				GREEN	Y+R	PRE/ACT
	l	t	r	p	l	t	r	p	l	t	r	p	l	t	r	p			
1	*	*	*		*	*	*			*					*		68.6	3	P
2				*				*				*				*	0.0	2	A
3			*				*		*	*	*		*	*	*		43.4	3	P

CYCLE= 120.0

VOLUME ADJUSTMENT WORKSHEET
PART 1 (MOVEMENT ADJUSTMENTS)

DIR	LTV	THV	RTV	PHF	LTFR	THFR	RTFR
EB	21	610	37	.940	22	649	39
WB	8	923	9	.920	9	1003	10
NB	383	189	47	.940	407	201	50
SB	53	51	264	.850	62	60	311

PART 2 (LANE GROUP ADJUSTMENTS)

DIR	LN GROUP	FLOW	N	LU	v	Plt	Prt
EB	LT	22	1	1.00	22	1.00	0.00
EB	TH-RT	688	1	1.00	688	0.00	0.06
WB	LT	9	1	1.00	9	1.00	0.00
WB	TH-RT	1013	1	1.00	1013	0.00	0.01
NB	LT	407	1	1.00	407	1.00	0.00
NB	TH-RT	251	1	1.00	251	0.00	0.20
SB	LT-TH-RT	433	1	1.00	433	0.14	0.72

PART 3 (OPPOSING VOLUME ADJUSTMENTS)

LEFT TURN	OPPOSING APPROACH									
BEING OPPOSED	VOLUMES			% OPPOSING LEFT TURN			# LANES			OPPOSING
	LT	TH	RT	LT	TH	RT	LT	TH	RT	VOLUME
EASTBOUND	9	1003	10	100	100	60	1	1	0	1009
WESTBOUND	22	649	39	100	100	60	1	1	0	672
NORTHBOUND	62	60	311	100	100	38	0	1	0	177
SOUTHBOUND	407	201	50	100	100	38	1	1	0	220

SATURATION FLOW ADJUSTMENT WORKSHEET

DIR	LN GROUP	IDEAL	N	Fwid	Fhv	Fgr	Fpark	Fbus	Farea	Frt	Flt	s
EB	LT	1800	1	0.867	0.995	1.000	1.000	1.000	1.000	1.000	0.068	105
EB	TH-RT	1800	1	0.867	0.995	1.000	1.000	1.000	1.000	0.991	1.000	1539
WB	LT	1800	1	0.933	0.985	0.985	1.000	1.000	1.000	1.000	0.282	460
WB	TH-RT	1800	1	0.933	0.985	0.985	1.000	1.000	1.000	0.999	1.000	1628
NB	LT	1800	1	0.939	0.990	1.000	1.000	1.000	1.000	1.000	0.619	1035
NB	TH-RT	1800	1	1.000	0.990	1.000	1.000	1,000	1.000	0.970	1.000	1729
SB	LT-TH-RT	1800	1	1.017	0.995	1.000	1.000	1.000	1.000	0.800	0.908	1323

SUPPLEMENTAL WORKSHEET FOR LEFT-TURN ADJUSTMENT FACTOR FLT

INPUT VARIABLES

DIR	C	G	N	Va	Vm	Vlt	Plt	No	Vo	Plto
EB	120	69	1	22	688	22	1.00	1	1009	0.00
WB	120	69	1	9	1013	9	1.00	1	672	0.00
NB	120	43	1	407	251	407	1.00	1	177	0.26
SB	120	43	1	433	371	62	0.14	1	220	0.00

CALCULATIONS

DIR	Sop	Yo	Gu	Fs	Pl	Gq	Pt	Gf	El	Fm	Flt
EB	1800	0.561	3.036	0.244	1.000	65.571	0.000	0.000	4.605	0.068	0.068
WB	1800	0.374	37.959	0.455	1.000	30.648	0.000	0.000	2.474	0.282	0.282
NB	1569	0.113	33.637	0.764	1.000	9.756	0.000	0.000	1.472	0.619	0.619
SB	1800	0.122	32.730	0.738	0.144	10.663	0.856	6.699	1.525	0.908	0.908

CAPACITY ANALYSIS WORKSHEET

DIR	LN GROUP	v	s	v/s	g/C	c	v/c	CRITICAL
EB	LT	22	105	0.21	0.57	60	0.37	
EB	TH-RT	688	1539	0.45	0.57	880	0.78	
WB	LT	9	460	0.02	0.57	263	0.03	
WB	TH-RT	1013	1628	0.62	0.57	931	1.09	*
NB	LT	407	1035	0.39	0.36	374	1.09	*
NB	TH-RT	251	1729	0.15	0.36	625	0.40	
SB	LT-TH-RT	433	1323	0.33	0.36	478	0.91	

CYCLE=120.0 LOST= 8.0 SUM V/S CRIT= 1.02 TOTAL V/C= 1.09

LEVEL OF SERVICE WORKSHEET

DIR	LN GROUP	v/c	g/C	C	d1	c	d2	PF	Delay	LOS	Avg Q	95% Q
EB	LT	0.37	0.57	120.0	10.61	60	1.76	1.00	12.37	B	0.3	1
EB	TH-RT	0.78	0.57	120.0	15.13	880	3.23	1.00	18.36	C	9.8	11
WB	LT	0.03	0.57	120.0	8.53	263	0.00	1.00	8.53	B	0.1	1
WB	TH-RT	1.09	0.57	120.0	22.14	931	51.50	1.00	73.64	F	28.0	63
NB	LT	1.09	0.36	120.0	30.65	374	65.93	1.00	96.58	F	15.3	34
NB	TH-RT	0.40	0.36	120.0	21.74	625	0.24	1.00	21.98	C	5.3	5
SB	LT-TH-RT	0.91	0.36	120.0	27.63	478	14.64	1.00	42.27	E	9.7	16

DIR	Delay	LOS
EB	18.18	C
WB	73.08	F
NB	68.14	F
SB	42.27	E

INTERSECTION DELAY = 53.39 INTERSECTION LOS=E

THE CYCLE LENGTH WITHIN THE BOUNDS OF 60 TO 120 SECONDS
WHICH MINIMIZES CRITICAL MOVEMENT DELAY IS 90.0 SECONDS

THE V/C RATIO CAN'T BE .95 FOR THE GIVEN CONDITIONS
for chosen cycle length 90.0
suggested timing phase 1 is 50.2 secs green, 3.0 secs yellow + red clear
suggested timing phase 2 is 0.0 secs green, 2.0 secs yellow + red clear

CINCH PROGRAM VERSION DATE 4-29-1988
1985 HCM - CHAPTER 9: SIGNALIZED - OPERATIONAL ANALYSIS
Great Rd./South Rd (#28)
195 PM Peak b
date:02-18-1992 time:12:10:53
LAST DATA SET NAMES LOADED OR SAVED
VOLUME=28pm95b GEOMETRICS=28pm95b SIGNAL=28pm95b
LOCATED IN CBD:N
VOLUME & GEOMETRICS

	VOLUMES			# OF LANES			LANE WIDTH			CROSS
DIR	LT	TH	RT	LT	TH	RT	LT	TH	RT	WALK
EB	21	610	37	1	1	0	8.0	8.0	0.0	54
WB	8	923	9	1	1	0	10.0	10.0	0.0	51
NB	392	189	47	1	1	0	10.2	12.0	0.0	38
SB	53	51	264	0	1	0	0.0	12.5	0.0	27

TRAFFIC & ROADWAY CONDITIONS

			ADJ PARK			PEDESTRIANS				ARR
DIR	GRADE	%HV	Y/N	MOVES	BUSES	PHF	CROSS	BUT	MIN TIME	TYPE
EB	0.0%	1.0%	Y	0	0	.940	10	Y	20.5	3
WB	3.0%	3.0%	N	0	0	.920	10	Y	20.5	3
NB	0.0%	2.0%	Y	0	0	.940	10	Y	16.5	3
SB	0.0%	1.0%	N	0	0	.850	10	Y	16.5	3

PHASINGS

	EASTBOUND				WESTBOUND				NORTHBOUND				SOUTHBOUND				GREEN	Y+R	PRE/ACT
	l	t	r	p	l	t	r	p	l	t	r	p	l	t	r	p			
1	*	*	*		*	*	*			*					*		68.0	3	.P
2				*				*				*				*	0.0	2	A
3			*				*		*	*	*		*	*	*		44.0	3	P

CYCLE= 120.0

VOLUME ADJUSTMENT WORKSHEET
PART 1 (MOVEMENT ADJUSTMENTS)

DIR	LTV	THV	RTV	PHF	LTFR	THFR	RTFR
EB	21	610	37	.940	22	649	39
WB	8	923	9	.920	9	1003	10
NB	392	189	47	.940	417	201	50
SB	53	51	264	.850	62	60	311

PART 2 (LANE GROUP ADJUSTMENTS)

DIR	LN GROUP	FLOW	N	LU	v	Plt	Prt
EB	LT	22	1	1.00	22	1.00	0.00
EB	TH-RT	688	1	1.00	688	0.00	0.06
WB	LT	9	1	1.00	9	1.00	0.00
WB	TH-RT	1013	1	1.00	1013	0.00	0.01
NB	LT	417	1	1.00	417	1.00	0.00
NB	TH-RT	251	1	1.00	251	0.00	0.20
SB	LT-TH-RT	433	1	1.00	433	0.14	0.72

PART 3 (OPPOSING VOLUME ADJUSTMENTS)

LEFT TURN	OPPOSING APPROACH									
BEING OPPOSED	VOLUMES			% OPPOSING LEFT TURN			# LANES			OPPOSING
	LT	TH	RT	LT	TH	RT	LT	TH	RT	VOLUME
EASTBOUND	9	1003	10	100	100	59	1	1	0	1009
WESTBOUND	22	649	39	100	100	59	1	1	0	672
NORTHBOUND	62	60	311	100	100	38	0	1	0	179
SOUTHBOUND	417	201	50	100	100	38	1	1	0	220

SATURATION FLOW ADJUSTMENT WORKSHEET

DIR	LN GROUP	IDEAL	N	Fwid	Fhv	Fgr	Fpark	Fbus	Farea	Frt	Flt	s
EB	LT	1800	1	0.867	0.995	1.000	1.000	1.000	1.000	1.000	0.064	99
EB	TH-RT	1800	1	0.867	0.995	1.000	1.000	1.000	1.000	0.991	1.000	1539
WB	LT	1800	1	0.933	0.985	0.985	1.000	1.000	1.000	1.000	0.279	455
WB	TH-RT	1800	1	0.933	0.985	0.985	1.000	1.000	1.000	0.999	1.000	1628
NB	LT	1800	1	0.939	0.990	1.000	1.000	1.000	1.000	1.000	0.619	1035
NB	TH-RT	1800	1	1.000	0.990	1.000	1.000	1.000	1.000	0.970	1.000	1729
SB	LT-TH-RT	1800	1	1.017	0.995	1.000	1.000	1.000	1.000	0.800	0.909	1324

SUPPLEMENTAL WORKSHEET FOR LEFT-TURN ADJUSTMENT FACTOR FLT

INPUT VARIABLES

DIR	C	G	N	Va	Vm	Vlt	Plt	No	Vo	Plto
EB	120	68	1	22	688	22	1.00	1	1009	0.00
WB	120	68	1	9	1013	9	1.00	1	672	0.00
NB	120	44	1	417	251	417	1.00	1	179	0.26
SB	120	44	1	433	371	62	0.14	1	220	0.00

CALCULATIONS

DIR	Sop	Yo	Gu	Fs	Pl	Gq	Pt	Gf	El	Fm	Flt
EB	1800	0.561	1.630	0.244	1.000	66.356	0.000	0.000	4.604	0.064	0.064
WB	1800	0.373	36.983	0.455	1.000	31.002	0.000	0.000	2.473	0.279	0.279
NB	1570	0.114	34.244	0.763	1.000	9.770	0.000	0.000	1.474	0.619	0.619
SB	1800	0.122	33.423	0.737	0.144	10.591	0.856	6.670	1.526	0.909	0.909

CAPACITY ANALYSIS WORKSHEET

DIR	LN GROUP	v	s	v/s	g/C	c	v/c	CRITICAL
EB	LT	22	99	0.22	0.57	56	0.40	
EB	TH-RT	688	1539	0.45	0.57	872	0.79	
WB	LT	9	455	0.02	0.57	258	0.03	
WB	TH-RT	1013	1628	0.62	0.57	922	1.10	*
NB	LT	417	1035	0.40	0.37	380	1.10	*
NB	TH-RT	251	1729	0.15	0.37	634	0.40	
SB	LT-TH-RT	433	1324	0.33	0.37	486	0.89	

CYCLE=120.0 LOST= 8.0 SUM V/S CRIT= 1.03 TOTAL V/C= 1.10

LEVEL OF SERVICE WORKSHEET

DIR	LN GROUP	v/c	g/C	C	d1	c	d2	PF	Delay	LOS	Avg Q	95% Q
EB	LT	0.40	0.57	120.0	11.05	56	2.37	1.00	13.42	B	0.3	1
EB	TH-RT	0.79	0.57	120.0	15.50	872	3.45	1.00	18.95	C	9.9	12
WB	LT	0.03	0.57	120.0	8.73	258	0.00	1.00	8.73	B	0.1	1
WB	TH-RT	1.10	0.57	120.0	22.68	922	55.90	1.00	78.58	F	29.4	67
NB	LT	1.10	0.37	120.0	30.62	380	69.97	1.00	100.59	F	16.1	36
NB	TH-RT	0.40	0.37	120.0	21.39	634	0.22	1.00	21.61	C	5.3	5
SB	LT-TH-RT	0.89	0.37	120.0	27.16	486	12.94	1.00	40.11	E	9.4	15

DIR	Delay	LOS
EB	18.77	C
WB	77.99	F
NB	70.91	F
SB	40.11	E

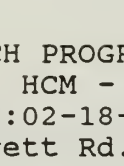
INTERSECTION DELAY = 55.68 INTERSECTION LOS=E

THE CYCLE LENGTH WITHIN THE BOUNDS OF 60 TO 120 SECONDS
WHICH MINIMIZES CRITICAL MOVEMENT DELAY IS 90.0 SECONDS

THE V/C RATIO CAN'T BE .95 FOR THE GIVEN CONDITIONS
for chosen cycle length 90.0
suggested timing phase 1 is 49.8 secs green, 3.0 secs yellow + red clear
suggested timing phase 2 is 0.0 secs green, 2.0 secs yellow + red clear

CINCH PROGRAM VERSION DATE 4-29-1988
1985 HCM - CHAPTER 10: UNSIGNALIZED - 4 APPROACHES (PAGE 1 OF 2)
DATE:02-18-1992 TIME:12:23:21
Marrett Rd./Mass. Ave. am 1990

LAST DATASETS LOADED OR SAVED
VOLUME=22am90 GEOMETRICS=22am90
KEY:



GENERAL CHARACTERISTICS
POPULATION GREATER THAN 250,000: YES
CONTROLS: FROM C: STOP
FROM D: STOP
PREVAILING SPEED: 40 MPH
MAIN STREET # OF LANES: 2 LANES
MAIN STREET APPROACH A - EXCLUSIVE RIGHT TURN LANE: NO
MAIN STREET APPROACH B - EXCLUSIVE RIGHT TURN LANE: NO

APPROACH: C: Mass. Ave.
EXCLUSIVE LEFT TURN LANES: NO
EXCLUSIVE RIGHT TURN LANES: NO
LARGE RIGHT TURN RADIUS OR SHALLOW RIGHT TURN ANGLE: NO
RIGHT TURN ACCELERATION LANE ON MAJOR: NO

APPROACH: D: MINUTEMAN DRWY
EXCLUSIVE LEFT TURN LANES: NO
EXCLUSIVE RIGHT TURN LANES: NO
LARGE RIGHT TURN RADIUS OR SHALLOW RIGHT TURN ANGLE: NO
RIGHT TURN ACCELERATION LANE ON MAJOR: NO

SIGHT DISTANCE RESTRICTIONS (in seconds)

APPROACH	A: Marrett WB	B: Marrett Rd.	C: Mass. Ave.	D: MINUTEMAN D
LEFTS	0.00	0.00	0.50	0.50
THRUS	0.00	0.00	0.50	0.50
RIGHTS	0.00	0.00	0.50	0.50

APPROACH	A: Marrett WB			B: Marrett Rd.			C: Mass. Ave.			D: MINUTEMAN D		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
VOLUME	108	888	130	91	762	0	103	22	50	0	14	37
PHF	0.86			0.88			0.79			0.85		
ADJ VOLUME	126	1033	151	103	866	0	130	28	63	0	16	44
PERCENT GRADE	0.00			-1.00			-3.20			0.00		
PERCENT CYCLES	0.00			0.00			0.00			0.00		
PASSENGER CARS	94.00			97.00			97.00			45.00		
PERCENT LT TRU	3.00			2.00			2.00			28.00		
PERCENT HV TRU	3.00			1.00			1.00			27.00		
PASS CAR/HR	131			100			111	24	54	0	23	61

STEP 1 RIGHT TURNS FROM	C:Mass. Ave.	D:MINUTEMAN DRWY
CONFLICTING FLOWS	1108	866
CRITICAL GAPS	5.9	5.9
CAPACITY	242	344
CAPACITY USED	22%	18%
IMPEDANCE FACTOR	0.84	0.88
ACTUAL CAPACITY	242	344

1985 HCM - CHAPTER 10: UNSIGNALIZED - 4 APPROACHES (PAGE 2 OF 2)
DATE:02-18-1992 TIME:12:23:21
Marrett Rd./Mass. Ave. am 1990

STEP 2 LEFT TURNS FROM	B:Marrett Rd. EB	A:Marrett WB
CONFLICTING FLOWS	1184	866
CRITICAL GAPS	4.7	4.7
CAPACITY	357	521
CAPACITY USED	28%	25%
IMPEDANCE FACTOR	0.79	0.81
ACTUAL CAPACITY	357	521

STEP 3 THRU MOVES FROM	C:Mass. Ave.	D:MINUTEMAN DRWY
CONFLICTING FLOWS	2203	2279
CRITICAL GAPS	6.6	6.6
CAPACITY	22	18
CAPACITY USED	107%	126%
IMPEDANCE FACTOR	0.00	0.00
ACTUAL CAPACITY	14	12

STEP 4 LEFT TURNS FROM	C:Mass. Ave.	D:MINUTEMAN DRWY
CONFLICTING FLOWS	2263	2370
CRITICAL GAPS	7.1	7.1
CAPACITY	14	10
ACTUAL CAPACITY	0	0

SUMMARY OF LEVEL OF SERVICE BY MOVEMENT

MOVEMENT	DEMAND	CAPACITY	RESERVE	LOS	AVG DEL(SEC)	AVG QUEUE
LT FROM A:	131	521	390	B	9.23	0.34
LT FROM B:	100	357	257	C	14.02	0.39
ALL MOVES FROM C:	188	0	-188	F	INFINITE	INFINITE
ALL MOVES FROM D:	85	0	-85	F	INFINITE	INFINITE

CINCH PROGRAM VERSION DATE 4-29-1988
1985 HCM - CHAPTER 9: SIGNALIZED - OPERATIONAL ANALYSIS
Marrett Rd./Mass Ave.
am 95 nb
date:08-22-1991 time:02:49:10
LAST DATA SET NAMES LOADED OR SAVED
VOLUME=22am95 GEOMETRICS=22am95 SIGNAL=22am95
LOCATED IN CBD:n
VOLUME & GEOMETRICS

	VOLUMES			# OF LANES			LANE WIDTH			CROSS
DIR	LT	TH	RT	LT	TH	RT	LT	TH	RT	WALK
EB	100	843	0	1	1	0	12.0	12.0	0.0	0
WB	98	987	112	1	1	0	12.0	12.0	0.0	0
NB	0	22	34	0	1	1	0.0	12.0	12.0	0
SB	67	14	55	1	1	0	12.0	12.0	0.0	0

TRAFFIC & ROADWAY CONDITIONS

			ADJ PARK			PEDESTRIANS				ARR
DIR	GRADE	%HV	Y/N	MOVES	BUSES	PHF	CROSS	BUT	MIN TIME	TYPE
EB	-1.0%	0.0%	N	0	0	.910	0	n	7.0	3
WB	0.0%	0.0%	N	0	0	.910	0	n	7.0	3
NB	0.0%	0.0%	N	0	0	.610	0	n	7.0	3
SB	-3.2%	0.0%	N	0	0	.710	0	n	7.0	3

PHASINGS

	EASTBOUND				WESTBOUND				NORTHBOUND				SOUTHBOUND				GREEN	Y+R	PRE/ACT
	l	t	r	p	l	t	r	p	l	t	r	p	l	t	r	p			
1	*				*						*						5.9	3	A
2		*	*			*	*				*						62.8	3	A
3									*	*	*		*	*	*		5.6	3	A

CYCLE= 83.2

VOLUME ADJUSTMENT WORKSHEET
PART 1 (MOVEMENT ADJUSTMENTS)

DIR	LTV	THV	RTV	PHF	LTFR	THFR	RTFR
EB	100	843	0	.910	110	926	0
WB	98	987	112	.910	108	1085	123
NB	0	22	34	.610	0	36	56
SB	67	14	55	.710	94	20	77

PART 2 (LANE GROUP ADJUSTMENTS)

DIR	LN GROUP	FLOW	N	LU	v	Plt	Prt
EB	LT	110	1	1.00	110	1.00	0.00
EB	TH	926	1	1.00	926	0.00	0.00
WB	LT	108	1	1.00	108	1.00	0.00
WB	TH-RT	1208	1	1.00	1208	0.00	0.10
NB	TH	36	1	1.00	36	0.00	0.00
NB	RT	56	1	1.00	56	0.00	1.00
SB	LT	94	1	1.00	94	1.00	0.00
SB	TH-RT	97	1	1.00	97	0.00	0.80

PART 3 (OPPOSING VOLUME ADJUSTMENTS)

LEFT TURN	OPPOSING APPROACH									
BEING OPPOSED	VOLUMES			% OPPOSING LEFT TURN			# LANES			OPPOSING
	LT	TH	RT	LT	TH	RT	LT	TH	RT	VOLUME
EASTBOUND	108	1085	123	100	0	0	1	1	0	0
WESTBOUND	110	926	0	100	0	0	1	1	0	0
SOUTHBOUND	0	36	56	100	100	0	0	1	1	36

SATURATION FLOW ADJUSTMENT WORKSHEET

DIR	LN GROUP	IDEAL	N	Fwid	Fhv	Fgr	Fpark	Fbus	Farea	Frt	Flt	s
EB	LT	1800	1	1.000	1.000	1.005	1.000	1.000	1.000	1.000	0.950	1719
EB	TH	1800	1	1.000	1.000	1.005	1.000	1.000	1.000	1.000	1.000	1809
WB	LT	1800	1	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.950	1710
WB	TH-RT	1800	1	1.000	1.000	1.000	1.000	1.000	1.000	0.985	1.000	1772
NB	TH	1800	1	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1800
NB	RT	1800	1	1.000	1.000	1.000	1.000	1.000	1.000	0.850	1.000	1530
SB	LT	1800	1	1.000	1.000	1.016	1.000	1.000	1.000	1.000	1.000	1829
SB	TH-RT	1800	1	1.000	1.000	1.016	1.000	1.000	1.000	0.880	1.000	1610

SUPPLEMENTAL WORKSHEET FOR LEFT-TURN ADJUSTMENT FACTOR FLT

INPUT VARIABLES

DIR	C	G	N	Va	Vm	Vlt	Plt	No	Vo	Plto
SB	83	6	1	94	97	94	1.00	1	36	0.00

CALCULATIONS

DIR	Sop	Yo	Gu	Fs	Pl	Gq	Pt	Gf	El	Fm	Flt
SB	1800	0.020	3.971	0.852	1.000	1.587	0.000	0.000	1.320	1.000	1.000

CAPACITY ANALYSIS WORKSHEET

DIR	LN GROUP	v	s	v/s	g/C	c	v/c	CRITICAL
EB	LT	110	1719	0.06	0.07	122	0.90	*
EB	TH	926	1809	0.51	0.75	1364	0.68	
WB	LT	108	1710	0.06	0.07	121	0.89	
WB	TH-RT	1208	1772	0.68	0.75	1337	0.90	*
NB	TH	36	1800	0.02	0.07	120	0.30	
NB	RT	56	1530	0.04	1.00	1530	0.04	
SB	LT	94	1829	0.05	0.07	122	0.77	
SB	TH-RT	97	1610	0.06	0.07	108	0.90	*

CYCLE= 83.2 LOST= 9.0 SUM V/S CRIT= 0.81 TOTAL V/C= 0.90

LEVEL OF SERVICE WORKSHEET

DIR	LN GROUP	v/c	g/C	C	d1	c	d2	PF	Delay	LOS	Avg Q	95% Q
EB	LT	0.90	0.07	83.2	29.16	122	36.90	1.00	66.06	F	3.2	7
EB	TH	0.68	0.75	83.2	3.91	1364	0.97	0.85	4.15	A	5.3	5
WB	LT	0.89	0.07	83.2	29.13	121	34.23	1.00	63.37	F	3.1	7
WB	TH-RT	0.90	0.75	83.2	5.99	1337	6.40	0.85	10.53	B	7.0	12
NB	TH	0.30	0.07	83.2	28.10	120	0.43	0.85	24.25	C	0.8	1
NB	RT	0.04	1.00	83.2	0.00	1530	0.00	0.85	0.00	A	0.0	1
SB	LT	0.77	0.07	83.2	29.03	122	16.86	0.85	39.01	D	2.0	4
SB	TH-RT	0.90	0.07	83.2	29.30	108	39.88	0.85	58.80	E	2.6	6

DIR	Delay	LOS
EB	10.72	B
WB	14.86	B
NB	9.53	B
SB	49.05	E

INTERSECTION DELAY = 15.53 INTERSECTION LOS=C

THE CYCLE LENGTH WITHIN THE BOUNDS OF 60 TO 120 SECONDS
WHICH MINIMIZES CRITICAL MOVEMENT DELAY IS 83.2 SECONDS

FOR A V/C RATIO OF .95 THE CYCLE SHOULD BE 59.2 SECONDS
THE EXISTING TIMING IS OPTIMAL

CINCH PROGRAM VERSION DATE 4-29-1988
1985 HCM - CHAPTER 9: SIGNALIZED - OPERATIONAL ANALYSIS
Marrett Rd./Mass Ave.
am 95 b
date:02-18-1992 time:12:18:15
LAST DATA SET NAMES LOADED OR SAVED
VOLUME=22am95b GEOMETRICS=22am95b SIGNAL=22am95b
LOCATED IN CBD:n
VOLUME & GEOMETRICS

	VOLUMES			# OF LANES			LANE WIDTH			CROSS
DIR	LT	TH	RT	LT	TH	RT	LT	TH	RT	WALK
EB	100	843	0	1	1	0	12.0	12.0	0.0	0
WB	98	1041	126	1	1	0	12.0	12.0	0.0	0
NB	0	22	34	0	1	1	0.0	12.0	12.0	0
SB	67	14	55	1	1	0	12.0	12.0	0.0	0

TRAFFIC & ROADWAY CONDITIONS

			ADJ PARK			PEDESTRIANS			ARR
DIR	GRADE	%HV	Y/N	MOVES	BUSES	PHF	CROSS	BUT MIN	TIME	TYPE
EB	-1.0%	0.0%	N	0	0	.910	0	n	7.0	3
WB	0.0%	0.0%	N	0	0	.910	0	n	7.0	3
NB	0.0%	0.0%	N	0	0	.610	0	n	7.0	3
SB	-3.2%	0.0%	N	0	0	.710	0	n	7.0	3

PHASINGS

	EASTBOUND				WESTBOUND				NORTHBOUND				SOUTHBOUND				GREEN	Y+R	PRE/ACT
	l	t	r	p	l	t	r	p	l	t	r	p	l	t	r	p			
1	*				*						*						6.8	3	A
2		*	*			*	*				*						77.2	3	A
3									*	*	*		*	*	*		6.4	3	A

CYCLE= 99.5

VOLUME ADJUSTMENT WORKSHEET
PART 1 (MOVEMENT ADJUSTMENTS)

DIR	LTV	THV	RTV	PHF	LTFR	THFR	RTFR
EB	100	843	0	.910	110	926	0
WB	98	1041	126	.910	108	1144	138
NB	0	22	34	.610	0	36	56
SB	67	14	55	.710	94	20	77

PART 2 (LANE GROUP ADJUSTMENTS)

DIR	LN GROUP	FLOW	N	LU	v	Plt	Prt
EB	LT	110	1	1.00	110	1.00	0.00
EB	TH	926	1	1.00	926	0.00	0.00
WB	LT	108	1	1.00	108	1.00	0.00
WB	TH-RT	1282	1	1.00	1282	0.00	0.11
NB	TH	36	1	1.00	36	0.00	0.00
NB	RT	56	1	1.00	56	0.00	1.00
SB	LT	94	1	1.00	94	1.00	0.00
SB	TH-RT	97	1	1.00	97	0.00	0.80

PART 3 (OPPOSING VOLUME ADJUSTMENTS)

LEFT TURN	OPPOSING APPROACH									
BEING OPPOSED	VOLUMES			% OPPOSING LEFT TURN			# LANES			OPPOSING
	LT	TH	RT	LT	TH	RT	LT	TH	RT	VOLUME
EASTBOUND	108	1144	138	100	0	0	1	1	0	0
WESTBOUND	110	926	0	100	0	0	1	1	0	0
SOUTHBOUND	0	36	56	100	100	0	0	1	1	36

SATURATION FLOW ADJUSTMENT WORKSHEET

DIR	LN GROUP	IDEAL	N	Fwid	Fhv	Fgr	Fpark	Fbus	Farea	Frt	Flt	s
EB	LT	1800	1	1.000	1.000	1.005	1.000	1.000	1.000	1.000	0.950	1719
EB	TH	1800	1	1.000	1.000	1.005	1.000	1.000	1.000	1.000	1.000	1809
WB	LT	1800	1	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.950	1710
WB	TH-RT	1800	1	1.000	1.000	1.000	1.000	1.000	1.000	0.984	1.000	1771
NB	TH	1800	1	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1800
NB	RT	1800	1	1.000	1.000	1.000	1.000	1.000	1.000	0.850	1.000	1530
SB	LT	1800	1	1.000	1.000	1.016	1.000	1.000	1.000	1.000	1.000	1829
SB	TH-RT	1800	1	1.000	1.000	1.016	1.000	1.000	1.000	0.880	1.000	1610

SUPPLEMENTAL WORKSHEET FOR LEFT-TURN ADJUSTMENT FACTOR FLT

INPUT VARIABLES

DIR	C	G	N	Va	Vm	Vlt	Plt	No	Vo	Plto
SB	100	6	1	94	97	94	1.00	1	36	0.00

CALCULATIONS

DIR	Sop	Yo	Gu	Fs	Pl	Gq	Pt	Gf	El	Fm	Flt
SB	1800	0.020	4.535	0.852	1.000	1.903	0.000	0.000	1.320	1.000	1.000

CAPACITY ANALYSIS WORKSHEET

DIR	LN GROUP	v	s	v/s	g/C	c	v/c	CRITICAL
EB	LT	110	1719	0.06	0.07	118	0.93	*
EB	TH	926	1809	0.51	0.78	1404	0.66	
WB	LT	108	1710	0.06	0.07	117	0.92	
WB	TH-RT	1282	1771	0.72	0.78	1375	0.93	*
NB	TH	36	1800	0.02	0.06	116	0.31	
NB	RT	56	1530	0.04	1.00	1530	0.04	
SB	LT	94	1829	0.05	0.06	118	0.80	
SB	TH-RT	97	1610	0.06	0.06	104	0.93	*

CYCLE= 99.5 LOST= 9.0 SUM V/S CRIT= 0.85 TOTAL V/C= 0.93

LEVEL OF SERVICE WORKSHEET

DIR	LN GROUP	v/c	g/C	C	d1	c	d2	PF	Delay	LOS	Avg Q	95% Q
EB	LT	0.93	0.07	99.5	35.05	118	44.43	1.00	79.47	F	3.8	8
EB	TH	0.66	0.78	99.5	3.88	1404	0.82	0.85	3.99	A	5.7	6
WB	LT	0.92	0.07	99.5	35.01	117	41.20	1.00	76.21	F	3.7	8
WB	TH-RT	0.93	0.78	99.5	6.86	1375	8.55	0.85	13.10	B	8.6	15
NB	TH	0.31	0.06	99.5	33.75	116	0.50	0.85	29.11	D	0.9	2
NB	RT	0.04	1.00	99.5	0.00	1530	0.00	0.85	0.00	A	0.0	1
SB	LT	0.80	0.06	99.5	34.88	118	20.17	0.85	46.79	E	2.4	5
SB	TH-RT	0.93	0.06	99.5	35.20	104	47.77	0.85	70.52	F	3.2	7

DIR	Delay	LOS
EB	12.00	B
WB	17.99	C
NB	11.44	B
SB	58.83	E

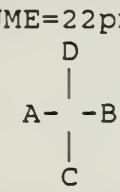
INTERSECTION DELAY = 18.36 INTERSECTION LOS=C

THE CYCLE LENGTH WITHIN THE BOUNDS OF 60 TO 120 SECONDS
WHICH MINIMIZES CRITICAL MOVEMENT DELAY IS 84.2 SECONDS

FOR A V/C RATIO OF .95 THE CYCLE SHOULD BE 84.2 SECONDS
for chosen cycle length 84.2
suggested timing phase 1 is 5.7 secs green, 3.0 secs yellow + red clear
suggested timing phase 2 is 64.2 secs green, 3.0 secs yellow + red clear
suggested timing phase 3 is 5.3 secs green, 3.0 secs yellow + red clear

CINCH PROGRAM VERSION DATE 4-29-1988
1985 HCM - CHAPTER 10: UNSIGNALIZED - 4 APPROACHES (PAGE 1 OF 2)
DATE:02-18-1992 TIME:12:26:24
pm 1990

LAST DATASETS LOADED OR SAVED
VOLUME=22pm90 GEOMETRICS=22am90
KEY:



GENERAL CHARACTERISTICS
POPULATION GREATER THAN 250,000: YES
CONTROLS: FROM C: STOP
FROM D: STOP
PREVAILING SPEED: 40 MPH
MAIN STREET # OF LANES: 2 LANES
MAIN STREET APPROACH A - EXCLUSIVE RIGHT TURN LANE: NO
MAIN STREET APPROACH B - EXCLUSIVE RIGHT TURN LANE: NO

APPROACH: C: Mass. Ave.
EXCLUSIVE LEFT TURN LANES: NO
EXCLUSIVE RIGHT TURN LANES: NO
LARGE RIGHT TURN RADIUS OR SHALLOW RIGHT TURN ANGLE: NO
RIGHT TURN ACCELERATION LANE ON MAJOR: NO

APPROACH: D: MINUTEMAN DRWY
EXCLUSIVE LEFT TURN LANES: NO
EXCLUSIVE RIGHT TURN LANES: NO
LARGE RIGHT TURN RADIUS OR SHALLOW RIGHT TURN ANGLE: NO
RIGHT TURN ACCELERATION LANE ON MAJOR: NO

SIGHT DISTANCE RESTRICTIONS (in seconds)

APPROACH	A: Marrett WB	B: Marrett Rd.	C: Mass. Ave.	D: MINUTEMAN D
LEFTS	0.00	0.00	0.50	0.50
THRUS	0.00	0.00	0.50	0.50
RIGHTS	0.00	0.00	0.50	0.50

APPROACH	A: Marrett WB			B: Marrett Rd.			C: Mass. Ave.			D: MINUTEMAN D		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
VOLUME	77	987	100	80	725	5	105	13	70	17	10	67
PHF	0.91			0.91			0.73			0.61		
ADJ VOLUME	85	1085	110	88	797	5	144	18	96	28	16	110
PERCENT GRADE	0.00			-1.00			-3.20			0.00		
PERCENT CYCLES	0.00			0.00			0.00			0.00		
PASSENGER CARS	98.00			99.00			98.00			98.00		
PERCENT LT TRU	1.00			1.00			1.00			1.00		
PERCENT HV TRU	1.00			0.00			1.00			1.00		
PASS CAR/HR	86			84			122	15	81	28	17	111

STEP 1 RIGHT TURNS FROM	C:Mass. Ave.	D:MINUTEMAN DRWY
CONFLICTING FLOWS	1140	799
CRITICAL GAPS	5.9	5.9
CAPACITY	231	377
CAPACITY USED	35%	30%
IMPEDANCE FACTOR	0.72	0.77
ACTUAL CAPACITY	231	377

DATE:02-18-1992 TIME:12:26:24
pm 1990

STEP 2 LEFT TURNS FROM	B:Marrett Rd. EB	A:Marrett WB
CONFLICTING FLOWS	1195	802
CRITICAL GAPS	4.7	4.7
CAPACITY	352	560
CAPACITY USED	24%	15%
IMPEDANCE FACTOR	0.83	0.90
ACTUAL CAPACITY	352	560

STEP 3 THRU MOVES FROM	C:Mass. Ave.	D:MINUTEMAN DRWY
CONFLICTING FLOWS	2114	2166
CRITICAL GAPS	6.6	6.6
CAPACITY	27	24
CAPACITY USED	56%	69%
IMPEDANCE FACTOR	0.52	0.37
ACTUAL CAPACITY	20	18

STEP 4 LEFT TURNS FROM	C:Mass. Ave.	D:MINUTEMAN DRWY
CONFLICTING FLOWS	2241	2280
CRITICAL GAPS	7.1	7.1
CAPACITY	15	13
ACTUAL CAPACITY	3	4

SUMMARY OF LEVEL OF SERVICE BY MOVEMENT

MOVEMENT	DEMAND	CAPACITY	RESERVE	LOS	AVG DEL(SEC)	AVG QUEUE
LT FROM A:	86	560	474	A	7.59	0.18
LT FROM B:	84	352	268	C	13.42	0.31
ALL MOVES FROM C:	218	5	-213	F	INFINITE	INFINITE
ALL MOVES FROM D:	156	17	-139	F	INFINITE	INFINITE

CINCH PROGRAM VERSION DATE 4-29-1988
1985 HCM - CHAPTER 9: SIGNALIZED - OPERATIONAL ANALYSIS
Marrett Rd./Mass Ave.
PM 95 nb
date:02-18-1992 time:12:21:17
LAST DATA SET NAMES LOADED OR SAVED
VOLUME=22pm95n GEOMETRICS=22pm95n SIGNAL=22pm95n
LOCATED IN CBD:n
VOLUME & GEOMETRICS

	VOLUMES			# OF LANES			LANE WIDTH			CROSS
DIR	LT	TH	RT	LT	TH	RT	LT	TH	RT	WALK
EB	117	707	0	1	1	0	12.0	12.0	0.0	0
WB	72	964	95	1	1	0	12.0	12.0	0.0	0
NB	0	13	62	0	1	1	0.0	12.0	12.0	0
SB	151	21	95	1	1	0	12.0	12.0	0.0	0

TRAFFIC & ROADWAY CONDITIONS

			ADJ PARK			PEDESTRIANS				ARR
DIR	GRADE	%HV	Y/N	MOVES	BUSES	PHF	CROSS	BUT	MIN TIME	TYPE
EB	-1.0%	0.0%	N	0	0	.910	0	n	7.0	3
WB	0.0%	0.0%	N	0	0	.910	0	n	7.0	3
NB	0.0%	0.0%	N	0	0	.610	0	n	7.0	3
SB	-3.2%	0.0%	N	0	0	.710	0	n	7.0	3

PHASINGS

	EASTBOUND				WESTBOUND				NORTHBOUND				SOUTHBOUND				GREEN	Y+R	PRE/ACT
	l	t	r	p	l	t	r	p	l	t	r	p	l	t	r	p			
1	*				*						*						7.3	3	A
2		*	*			*	*				*						63.7	3	A
3									*	*	*		*	*	*		11.3	3	A

CYCLE= 91.3

VOLUME ADJUSTMENT WORKSHEET
PART 1 (MOVEMENT ADJUSTMENTS)

DIR	LTV	THV	RTV	PHF	LTFR	THFR	RTFR
EB	117	707	0	.910	129	777	0
WB	72	964	95	.910	79	1059	104
NB	0	13	62	.610	0	21	102
SB	151	21	95	.710	213	30	134

PART 2 (LANE GROUP ADJUSTMENTS)

DIR	LN GROUP	FLOW	N	LU	v	Plt	Prt
EB	LT	129	1	1.00	129	1.00	0.00
EB	TH	777	1	1.00	777	0.00	0.00
WB	LT	79	1	1.00	79	1.00	0.00
WB	TH-RT	1164	1	1.00	1164	0.00	0.09
NB	TH	21	1	1.00	21	0.00	0.00
NB	RT	102	1	1.00	102	0.00	1.00
SB	LT	213	1	1.00	213	1.00	0.00
SB	TH-RT	163	1	1.00	163	0.00	0.82

PART 3 (OPPOSING VOLUME ADJUSTMENTS)

LEFT TURN	OPPOSING APPROACH									
BEING OPPOSED	VOLUMES			% OPPOSING LEFT TURN			# LANES			OPPOSING
	LT	TH	RT	LT	TH	RT	LT	TH	RT	VOLUME
EASTBOUND	79	1059	104	100	0	0	1	1	0	0
WESTBOUND	129	777	0	100	0	0	1	1	0	0
SOUTHBOUND	0	21	102	100	100	0	0	1	1	21

SATURATION FLOW ADJUSTMENT WORKSHEET

DIR	LN GROUP	IDEAL	N	Fwid	Fhv	Fgr	Fpark	Fbus	Farea	Frt	Flt	s
EB	LT	1800	1	1.000	1.000	1.005	1.000	1.000	1.000	1.000	0.950	1719
EB	TH	1800	1	1.000	1.000	1.005	1.000	1.000	1.000	1.000	1.000	1809
WB	LT	1800	1	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.950	1710
WB	TH-RT	1800	1	1.000	1.000	1.000	1.000	1.000	1.000	0.987	1.000	1776
NB	TH	1800	1	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1800
NB	RT	1800	1	1.000	1.000	1.000	1.000	1.000	1.000	0.850	1.000	1530
SB	LT	1800	1	1.000	1.000	1.016	1.000	1.000	1.000	1.000	1.000	1829
SB	TH-RT	1800	1	1.000	1.000	1.016	1.000	1.000	1.000	0.877	1.000	1604

SUPPLEMENTAL WORKSHEET FOR LEFT-TURN ADJUSTMENT FACTOR FLT

INPUT VARIABLES

DIR	C	G	N	Va	Vm	Vlt	Plt	No	Vo	Plto
SB	91	11	1	213	163	213	1.00	1	21	0.00

CALCULATIONS

DIR	Sop	Yo	Gu	Fs	Pl	Gq	Pt	Gf	El	Fm	Flt
SB	1800	0.012	10.349	0.862	1.000	0.958	0.000	0.000	1.306	1.000	1.000

CAPACITY ANALYSIS WORKSHEET

DIR	LN GROUP	v	s	v/s	g/C	c	v/c	CRITICAL
EB	LT	129	1719	0.07	0.08	137	0.94	*
EB	TH	777	1809	0.43	0.70	1263	0.62	
WB	LT	79	1710	0.05	0.08	136	0.58	
WB	TH-RT	1164	1776	0.66	0.70	1239	0.94	*
NB	TH	21	1800	0.01	0.12	223	0.10	
NB	RT	102	1530	0.07	1.00	1530	0.07	
SB	LT	213	1829	0.12	0.12	226	0.94	*
SB	TH-RT	163	1604	0.10	0.12	199	0.82	

CYCLE= 91.3 LOST= 9.0 SUM V/S CRIT= 0.85 TOTAL V/C= 0.94

LEVEL OF SERVICE WORKSHEET

DIR	LN GROUP	v/c	g/C	C	d1	c	d2	PF	Delay	LOS	Avg Q	95% Q
EB	LT	0.94	0.08	91.3	31.76	137	42.07	1.00	73.84	F	4.1	9
EB	TH	0.62	0.70	91.3	5.55	1263	0.66	0.85	5.27	B	6.0	6
WB	LT	0.58	0.08	91.3	30.81	136	4.36	1.00	35.17	D	1.8	3
WB	TH-RT	0.94	0.70	91.3	9.19	1239	9.90	0.85	16.22	C	9.7	17
NB	TH	0.10	0.12	91.3	26.95	223	0.01	0.85	22.91	C	0.5	1
NB	RT	0.07	1.00	91.3	0.00	1530	0.00	0.85	0.00	A	0.0	1
SB	LT	0.94	0.12	91.3	30.14	226	31.07	0.85	52.03	E	5.4	10
SB	TH-RT	0.82	0.12	91.3	29.65	199	15.80	0.85	38.64	D	3.6	6

DIR	Delay	LOS
EB	15.01	C
WB	17.43	C
NB	3.97	A
SB	46.21	E

INTERSECTION DELAY = 20.06 INTERSECTION LOS=C

THE CYCLE LENGTH WITHIN THE BOUNDS OF 60 TO 120 SECONDS
WHICH MINIMIZES CRITICAL MOVEMENT DELAY IS 91.3 SECONDS

FOR A V/C RATIO OF .95 THE CYCLE SHOULD BE 82.6 SECONDS
THE EXISTING TIMING IS OPTIMAL

CINCH PROGRAM VERSION DATE 4-29-1988
1985 HCM - CHAPTER 9: SIGNALIZED - OPERATIONAL ANALYSIS
Marrett Rd./Mass Ave.
PM 95 b
date:08-19-1991 time:21:53:21
LAST DATA SET NAMES LOADED OR SAVED
VOLUME=22pm95b GEOMETRICS=22pm95n SIGNAL=22pm95b
LOCATED IN CBD:n
VOLUME & GEOMETRICS

	VOLUMES			# OF LANES			LANE WIDTH			CROSS
DIR	LT	TH	RT	LT	TH	RT	LT	TH	RT	WALK
EB	117	747	0	1	1	0	12.0	12.0	0.0	0
WB	72	968	95	1	1	0	12.0	12.0	0.0	0
NB	0	13	62	0	1	1	0.0	12.0	12.0	0
SB	163	21	95	1	1	0	12.0	12.0	0.0	0

TRAFFIC & ROADWAY CONDITIONS

			ADJ PARK			PEDESTRIANS				ARR
DIR	GRADE	%HV	Y/N	MOVES	BUSES	PHF	CROSS	BUT	MIN TIME	TYPE
EB	-1.0%	0.0%	N	0	0	.910	0	n	7.0	3
WB	0.0%	0.0%	N	0	0	.910	0	n	7.0	3
NB	0.0%	0.0%	N	0	0	.610	0	n	7.0	3
SB	-3.2%	0.0%	N	0	0	.710	0	n	7.0	3

PHASINGS

	EASTBOUND				WESTBOUND				NORTHBOUND				SOUTHBOUND				GREEN	Y+R	PRE/ACT
	l	t	r	p	l	t	r	p	l	t	r	p	l	t	r	p			
1	*				*						*						7.5	3	A
2		*	*			*	*				*						65.8	3	A
3									*	*	*		*	*	*		12.6	3	A

CYCLE= 94.9

VOLUME ADJUSTMENT WORKSHEET
PART 1 (MOVEMENT ADJUSTMENTS)

DIR	LTV	THV	RTV	PHF	LTFR	THFR	RTFR
EB	117	747	0	.910	129	821	0
WB	72	968	95	.910	79	1064	104
NB	0	13	62	.610	0	21	102
SB	163	21	95	.710	230	30	134

PART 2 (LANE GROUP ADJUSTMENTS)

DIR	LN GROUP	FLOW	N	LU	v	Plt	Prt
EB	LT	129	1	1.00	129	1.00	0.00
EB	TH	821	1	1.00	821	0.00	0.00
WB	LT	79	1	1.00	79	1.00	0.00
WB	TH-RT	1168	1	1.00	1168	0.00	0.09
NB	TH	21	1	1.00	21	0.00	0.00
NB	RT	102	1	1.00	102	0.00	1.00
SB	LT	230	1	1.00	230	1.00	0.00
SB	TH-RT	163	1	1.00	163	0.00	0.82

PART 3 (OPPOSING VOLUME ADJUSTMENTS)

LEFT TURN	OPPOSING APPROACH									
BEING OPPOSED	VOLUMES			% OPPOSING LEFT TURN			# LANES			OPPOSING
	LT	TH	RT	LT	TH	RT	LT	TH	RT	VOLUME
EASTBOUND	79	1064	104	100	0	0	1	1	0	0
WESTBOUND	129	821	0	100	0	0	1	1	0	0
SOUTHBOUND	0	21	102	100	100	0	0	1	1	21

SATURATION FLOW ADJUSTMENT WORKSHEET

DIR	LN GROUP	IDEAL	N	Fwid	Fhv	Fgr	Fpark	Fbus	Farea	Frt	Flt	s
EB	LT	1800	1	1.000	1.000	1.005	1.000	1.000	1.000	1.000	0.950	1719
EB	TH	1800	1	1.000	1.000	1.005	1.000	1.000	1.000	1.000	1.000	1809
WB	LT	1800	1	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.950	1710
WB	TH-RT	1800	1	1.000	1.000	1.000	1.000	1.000	1.000	0.987	1.000	1776
NB	TH	1800	1	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1800
NB	RT	1800	1	1.000	1.000	1.000	1.000	1.000	1.000	0.850	1.000	1530
SB	LT	1800	1	1.000	1.000	1.016	1.000	1.000	1.000	1.000	1.000	1829
SB	TH-RT	1800	1	1.000	1.000	1.016	1.000	1.000	1.000	0.877	1.000	1604

SUPPLEMENTAL WORKSHEET FOR LEFT-TURN ADJUSTMENT FACTOR FLT

INPUT VARIABLES

DIR	C	G	N	Va	Vm	Vlt	Plt	No	Vo	Plto
SB	95	13	1	230	163	230	1.00	1	21	0.00

CALCULATIONS

DIR	Sop	Yo	Gu	Fs	Pl	Gq	Pt	Gf	El	Fm	Flt
SB	1800	0.012	11.580	0.862	1.000	0.986	0.000	0.000	1.306	1.000	1.000

CAPACITY ANALYSIS WORKSHEET

DIR	LN GROUP	v	s	v/s	g/C	c	v/c	CRITICAL
EB	LT	129	1719	0.07	0.08	136	0.95	*
EB	TH	821	1809	0.45	0.69	1255	0.65	
WB	LT	79	1710	0.05	0.08	135	0.59	
WB	TH-RT	1168	1776	0.66	0.69	1232	0.95	*
NB	TH	21	1800	0.01	0.13	238	0.09	
NB	RT	102	1530	0.07	1.00	1530	0.07	
SB	LT	230	1829	0.13	0.13	242	0.95	*
SB	TH-RT	163	1604	0.10	0.13	212	0.77	

CYCLE= 94.9 LOST= 9.0 SUM V/S CRIT= 0.86 TOTAL V/C= 0.95

LEVEL OF SERVICE WORKSHEET

DIR	LN GROUP	v/c	g/C	C	d1	c	d2	PF	Delay	LOS	Avg Q	95% Q
EB	LT	0.95	0.08	94.9	33.07	136	44.55	1.00	77.61	F	4.3	9
EB	TH	0.65	0.69	94.9	6.19	1255	0.88	0.85	6.01	B	6.6	7
WB	LT	0.59	0.08	94.9	32.08	135	4.57	1.00	36.65	D	1.9	3
WB	TH-RT	0.95	0.69	94.9	9.88	1232	10.97	0.85	17.72	C	10.5	18
NB	TH	0.09	0.13	94.9	27.47	238	0.00	0.85	23.35	C	0.5	1
NB	RT	0.07	1.00	94.9	0.00	1530	0.00	0.85	0.00	A	0.0	1
SB	LT	0.95	0.13	94.9	31.04	242	31.67	0.85	53.30	E	6.0	11
SB	TH-RT	0.77	0.13	94.9	30.22	212	10.51	0.85	34.62	D	3.7	6

DIR	Delay	LOS
EB	15.70	C
WB	18.92	C
NB	4.05	A
SB	45.53	E

INTERSECTION DELAY = 20.98 INTERSECTION LOS=C

THE CYCLE LENGTH WITHIN THE BOUNDS OF 60 TO 120 SECONDS
WHICH MINIMIZES CRITICAL MOVEMENT DELAY IS 94.9 SECONDS

FOR A V/C RATIO OF .95 THE CYCLE SHOULD BE 93.1 SECONDS
THE EXISTING TIMING IS OPTIMAL

CINCH PROGRAM VERSION DATE 1-12-1987
1985 HCM - CHAPTER 10: UNSIGNALIZED - 4 APPROACHES (PAGE 1 OF 2)
DATE:08-21-1991 TIME:21:46:15
ROUTE 2A @ BEDFORD RD/VIRGINIA RD

LAST DATASETS LOADED OR SAVED
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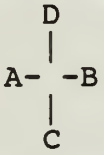

GENERAL CHARACTERISTICS
POPULATION GREATER THAN 250,000: YES
CONTROLS: FROM C: STOP
FROM D: STOP
PREVAILING SPEED: 40 MPH
MAIN STREET # OF LANES: 2 LANES
MAIN STREET APPROACH A - EXCLUSIVE RIGHT TURN LANE: NO
MAIN STREET APPROACH B - EXCLUSIVE RIGHT TURN LANE: NO

MINOR STREET LANES

APPROACH: C: BEDFORD RD
EXCLUSIVE LEFT TURN LANES: NO
EXCLUSIVE RIGHT TURN LANES: NO
LARGE RIGHT TURN RADIUS OR SHALLOW RIGHT TURN ANGLE: YES
RIGHT TURN ACCELERATION LANE ON MAJOR: NO

APPROACH: D: VIRGINIA RD
EXCLUSIVE LEFT TURN LANES: NO
EXCLUSIVE RIGHT TURN LANES: NO
LARGE RIGHT TURN RADIUS OR SHALLOW RIGHT TURN ANGLE: NO
RIGHT TURN ACCELERATION LANE ON MAJOR: NO

SIGHT DISTANCE RESTRICTIONS (in seconds)

APPROACH	A: RT 2A EB	B: RT 2A WB	C: BEDFORD RD	D: VIRGINIA RD
LEFTS	0.00	0.00	0.00	0.00
THRUS	0.00	0.00	0.00	0.00
RIGHTS	0.00	0.00	0.00	0.00

APPROACH	A: RT 2A EB			B: RT 2A WB			C: BEDFORD RD			D: VIRGINIA RD		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
VOLUME	0	1015	102	75	466	0	10	4	246	0	2	0
PHF	0.90			0.90			0.90			0.90		
ADJ VOLUME	0	1128	113	83	518	0	11	4	273	0	2	0
PERCENT GRADE	0.00			0.00			-1.00					
PASS CAR/HR	0			92			12	5	287	0	3	0

STEP 1 RIGHT TURNS FROM	C:BEDFORD RD	D:VIRGINIA RD
CONFLICTING FLOWS	1184	518
CRITICAL GAPS	4.9	5.4
CAPACITY	368	629
CAPACITY USED	78%	0%
IMPEDANCE FACTOR	0.27	1.00
ACTUAL CAPACITY	368	629

1985 HCM - CHAPTER 10: UNSIGNALIZED - 4 APPROACHES (PAGE 2 OF 2)
DATE:08-21-1991 TIME:21:46:15
ROUTE 2A @ BEDFORD RD/VIRGINIA RD

STEP 2 LEFT TURNS FROM	B:RT 2A WB	A:RT 2A EB
CONFLICTING FLOWS	1241	518
CRITICAL GAPS	4.7	4.7
CAPACITY	381	781
CAPACITY USED	24%	0%
IMPEDANCE FACTOR	0.82	1.00
ACTUAL CAPACITY	381	781

STEP 3 THRU MOVES FROM	C:BEDFORD RD	D:VIRGINIA RD
CONFLICTING FLOWS	1786	1842
CRITICAL GAPS	5.6	6.1
CAPACITY	133	94
CAPACITY USED	4%	4%
IMPEDANCE FACTOR	0.98	0.98
ACTUAL CAPACITY	109	77

STEP 4 LEFT TURNS FROM	C:BEDFORD RD	D:VIRGINIA RD
CONFLICTING FLOWS	1788	2120
CRITICAL GAPS	6.1	6.6
CAPACITY	101	49
ACTUAL CAPACITY	81	11

SUMMARY OF LEVEL OF SERVICE BY MOVEMENT

MOVEMENT	DEMAND	CAPACITY	RESERVE	LOS	AVG DEL(SEC)	AVG QUEU
LT FROM B:	92	381	289	C	12.44	0.32
ALL MOVES FROM C:	303	314	11	E	341.07	28.74
ALL MOVES FROM D:	3	77	74	E	48.70	0.05

CINCH PROGRAM VERSION DATE 1-12-1987
1985 HCM - CHAPTER 10: UNSIGNALIZED - 4 APPROACHES (PAGE 1 OF 2)
DATE:08-21-1991 TIME:21:48:31
Rt. 2A/Bedford/Virginia am 1995

LAST DATASETS LOADED OR SAVED
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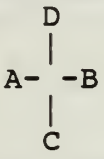

GENERAL CHARACTERISTICS
POPULATION GREATER THAN 250,000: YES
CONTROLS: FROM C: STOP
FROM D: STOP
PREVAILING SPEED: 40 MPH
MAIN STREET # OF LANES: 2 LANES
MAIN STREET APPROACH A - EXCLUSIVE RIGHT TURN LANE: NO
MAIN STREET APPROACH B - EXCLUSIVE RIGHT TURN LANE: NO

MINOR STREET LANES

APPROACH: C: BEDFORD RD
EXCLUSIVE LEFT TURN LANES: NO
EXCLUSIVE RIGHT TURN LANES: NO
LARGE RIGHT TURN RADIUS OR SHALLOW RIGHT TURN ANGLE: YES
RIGHT TURN ACCELERATION LANE ON MAJOR: NO

APPROACH: D: VIRGINIA RD
EXCLUSIVE LEFT TURN LANES: NO
EXCLUSIVE RIGHT TURN LANES: NO
LARGE RIGHT TURN RADIUS OR SHALLOW RIGHT TURN ANGLE: NO
RIGHT TURN ACCELERATION LANE ON MAJOR: NO

SIGHT DISTANCE RESTRICTIONS (in seconds)

APPROACH	A: RT 2A EB	B: RT 2A WB	C: BEDFORD RD	D: VIRGINIA RD
LEFTS	0.00	0.00	0.00	0.00
THRUS	0.00	0.00	0.00	0.00
RIGHTS	0.00	0.00	0.00	0.00

APPROACH	A: RT 2A EB			B: RT 2A WB			C: BEDFORD RD			D: VIRGINIA RD		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
VOLUME	0	1001	116	78	592	0	10	0	285	0	1	0
PHF	0.90			0.90			0.90			0.90		
ADJ VOLUME	0	1112	129	87	658	0	11	0	317	0	1	0
PERCENT GRADE	0.00			0.00			-1.00					
PASS CAR/HR	0			95			12	0	333	0	2	0

STEP 1 RIGHT TURNS FROM	C:BEDFORD RD	D:VIRGINIA RD
CONFLICTING FLOWS	1177	658
CRITICAL GAPS	4.9	5.4
CAPACITY	371	537
CAPACITY USED	90%	0%
IMPEDANCE FACTOR	0.14	1.00
ACTUAL CAPACITY	371	537

1985 HCM - CHAPTER 10: UNSIGNALIZED - 4 APPROACHES (PAGE 2 OF 2)
DATE:08-21-1991 TIME:21:48:31
Rt. 2A/Bedford/Virginia am 1995

STEP 2 LEFT TURNS FROM	B:RT 2A WB	A:RT 2A EB
CONFLICTING FLOWS	1241	658
CRITICAL GAPS	4.7	4.7
CAPACITY	381	679
CAPACITY USED	25%	0%
IMPEDANCE FACTOR	0.82	1.00
ACTUAL CAPACITY	381	679

STEP 3 THRU MOVES FROM	C:BEDFORD RD	D:VIRGINIA RD
CONFLICTING FLOWS	1921	1986
CRITICAL GAPS	5.6	6.1
CAPACITY	113	78
CAPACITY USED	0%	2%
IMPEDANCE FACTOR	1.00	0.99
ACTUAL CAPACITY	92	64

STEP 4 LEFT TURNS FROM	C:BEDFORD RD	D:VIRGINIA RD
CONFLICTING FLOWS	1922	2302
CRITICAL GAPS	6.1	6.6
CAPACITY	85	38
ACTUAL CAPACITY	68	4

SUMMARY OF LEVEL OF SERVICE BY MOVEMENT

MOVEMENT	DEMAND	CAPACITY	RESERVE	LOS	AVG DEL(SEC)	AVG QUEU
LT FROM B:	95	381	286	C	12.60	0.33
ALL MOVES FROM C:	344	322	-22	F	INFINITE	INFINITE
ALL MOVES FROM D:	2	64	62	E	58.11	0.03

CINCH PROGRAM VERSION DATE 1-12-1987
1985 HCM - CHAPTER 10: UNSIGNALIZED - 4 APPROACHES (PAGE 1 OF 2)
DATE:08-21-1991 TIME:21:50:17
Rt. 2A/Bedford/Virginia am 1995 b

LAST DATASETS LOADED OR SAVED
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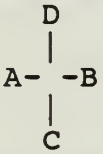

GENERAL CHARACTERISTICS
POPULATION GREATER THAN 250,000: YES
CONTROLS: FROM C: STOP
FROM D: STOP
PREVAILING SPEED: 40 MPH
MAIN STREET # OF LANES: 2 LANES
MAIN STREET APPROACH A - EXCLUSIVE RIGHT TURN LANE: NO
MAIN STREET APPROACH B - EXCLUSIVE RIGHT TURN LANE: NO

MINOR STREET LANES

APPROACH: C: BEDFORD RD
EXCLUSIVE LEFT TURN LANES: NO
EXCLUSIVE RIGHT TURN LANES: NO
LARGE RIGHT TURN RADIUS OR SHALLOW RIGHT TURN ANGLE: YES
RIGHT TURN ACCELERATION LANE ON MAJOR: NO

APPROACH: D: VIRGINIA RD
EXCLUSIVE LEFT TURN LANES: NO
EXCLUSIVE RIGHT TURN LANES: NO
LARGE RIGHT TURN RADIUS OR SHALLOW RIGHT TURN ANGLE: NO
RIGHT TURN ACCELERATION LANE ON MAJOR: NO

SIGHT DISTANCE RESTRICTIONS (in seconds)

APPROACH	A: RT 2A EB	B: RT 2A WB	C: BEDFORD RD	D: VIRGINIA RD
LEFTS	0.00	0.00	0.00	0.00
THRUS	0.00	0.00	0.00	0.00
RIGHTS	0.00	0.00	0.00	0.00

APPROACH	A: RT 2A EB			B: RT 2A WB			C: BEDFORD RD			D: VIRGINIA RD		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
VOLUME	0	1048	116	78	595	0	10	0	285	0	1	0
PHF	0.90			0.90			0.90			0.90		
ADJ VOLUME	0	1164	129	87	661	0	11	0	317	0	1	0
PERCENT GRADE	0.00			0.00			-1.00					
PASS CAR/HR	0			95			12	0	333	0	2	0

STEP 1 RIGHT TURNS FROM	C:BEDFORD RD	D:VIRGINIA RD
CONFLICTING FLOWS	1229	661
CRITICAL GAPS	4.9	5.4
CAPACITY	351	535
CAPACITY USED	95%	0%
IMPEDANCE FACTOR	0.08	1.00
ACTUAL CAPACITY	351	535

DATE:08-21-1991 TIME:21:50:17
Rt. 2A/Bedford/Virginia am 1995 b

STEP 2 LEFT TURNS FROM	B:RT 2A WB	A:RT 2A EB
CONFLICTING FLOWS	1293	661
CRITICAL GAPS	4.7	4.7
CAPACITY	362	677
CAPACITY USED	26%	0%
IMPEDANCE FACTOR	0.80	1.00
ACTUAL CAPACITY	362	677

STEP 3 THRU MOVES FROM	C:BEDFORD RD	D:VIRGINIA RD
CONFLICTING FLOWS	1977	2041
CRITICAL GAPS	5.6	6.1
CAPACITY	106	73
CAPACITY USED	0%	2%
IMPEDANCE FACTOR	1.00	0.99
ACTUAL CAPACITY	85	58

STEP 4 LEFT TURNS FROM	C:BEDFORD RD	D:VIRGINIA RD
CONFLICTING FLOWS	1978	2358
CRITICAL GAPS	6.1	6.6
CAPACITY	79	35
ACTUAL CAPACITY	63	2

SUMMARY OF LEVEL OF SERVICE BY MOVEMENT

MOVEMENT	DEMAND	CAPACITY	RESERVE	LOS	AVG DEL(SEC)	AVG QUEUE
LT FROM B:	95	362	266	C	13.51	0.36
ALL MOVES FROM C:	344	304	-40	F	INFINITE	INFINITE
ALL MOVES FROM D:	2	58	57	E	63.50	0.03

CINCH PROGRAM VERSION DATE 1-12-1987
1985 HCM - CHAPTER 10: UNSIGNALIZED - 4 APPROACHES (PAGE 1 OF 2)
DATE:07-11-1991 TIME:10:11:43
ROUTE 2A @ BEDFORD RD/VIRGINIA RD

LAST DATASETS LOADED OR SAVED
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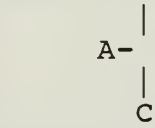

GENERAL CHARACTERISTICS
POPULATION GREATER THAN 250,000: YES
CONTROLS: FROM C: STOP
FROM D: STOP
PREVAILING SPEED: 40 MPH
MAIN STREET # OF LANES: 2 LANES
MAIN STREET APPROACH A - EXCLUSIVE RIGHT TURN LANE: NO
MAIN STREET APPROACH B - EXCLUSIVE RIGHT TURN LANE: NO

MINOR STREET LANES

APPROACH: C: BEDFORD RD
EXCLUSIVE LEFT TURN LANES: NO
EXCLUSIVE RIGHT TURN LANES: NO
LARGE RIGHT TURN RADIUS OR SHALLOW RIGHT TURN ANGLE: YES
RIGHT TURN ACCELERATION LANE ON MAJOR: NO

APPROACH: D: VIRGINIA RD
EXCLUSIVE LEFT TURN LANES: NO
EXCLUSIVE RIGHT TURN LANES: NO
LARGE RIGHT TURN RADIUS OR SHALLOW RIGHT TURN ANGLE: NO
RIGHT TURN ACCELERATION LANE ON MAJOR: NO

SIGHT DISTANCE RESTRICTIONS (in seconds)

APPROACH	A: RT 2A EB	B: RT 2A WB	C: BEDFORD RD	D: VIRGINIA RD
LEFTS	0.00	0.00	0.00	0.00
THRUS	0.00	0.00	0.00	0.00
RIGHTS	0.00	0.00	0.00	0.00

APPROACH	A: RT 2A EB			B: RT 2A WB			C: BEDFORD RD			D: VIRGINIA RD		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
VOLUME	0	559	31	162	1213	1	47	5	68	1	1	0
PHF	0.90			0.90			0.90			0.90		
ADJ VOLUME	0	621	34	180	1348	1	52	6	76	1	1	0
PERCENT GRADE	0.00			0.00			-1.00					
PASS CAR/HR	0			198			55	6	79	2	2	0

STEP 1 RIGHT TURNS FROM	C:BEDFORD RD	D:VIRGINIA RD
CONFLICTING FLOWS	638	1348
CRITICAL GAPS	4.9	5.4
CAPACITY	647	244
CAPACITY USED	12%	0%
IMPEDANCE FACTOR	0.92	1.00
ACTUAL CAPACITY	647	244

1985 HCM - CHAPTER 10: UNSIGNALIZED - 4 APPROACHES (PAGE 2 OF 2)
DATE:07-11-1991 TIME:10:11:43
ROUTE 2A @ BEDFORD RD/VIRGINIA RD

STEP 2 LEFT TURNS FROM	B:RT 2A WB	A:RT 2A EB
CONFLICTING FLOWS	656	1349
CRITICAL GAPS	4.7	4.7
CAPACITY	681	342
CAPACITY USED	29%	0%
IMPEDANCE FACTOR	0.78	1.00
ACTUAL CAPACITY	681	342

STEP 3 THRU MOVES FROM	C:BEDFORD RD	D:VIRGINIA RD
CONFLICTING FLOWS	2167	2184
CRITICAL GAPS	5.6	6.1
CAPACITY	85	60
CAPACITY USED	7%	3%
IMPEDANCE FACTOR	0.96	0.99
ACTUAL CAPACITY	66	47

STEP 4 LEFT TURNS FROM	C:BEDFORD RD	D:VIRGINIA RD
CONFLICTING FLOWS	2168	2265
CRITICAL GAPS	6.1	6.6
CAPACITY	62	40
ACTUAL CAPACITY	47	27

SUMMARY OF LEVEL OF SERVICE BY MOVEMENT

MOVEMENT	DEMAND	CAPACITY	RESERVE	LOS	AVG DEL(SEC)	AVG QUEUE
LT FROM B:	198	681	483	A	7.45	0.41
ALL MOVES FROM C:	140	102	-38	F	INFINITE	INFINITE
ALL MOVES FROM D:	3	35	31	E	115.44	0.11

CINCH PROGRAM VERSION DATE 4-29-1988
1985 HCM - CHAPTER 10: UNSIGNALIZED - 4 APPROACHES (PAGE 1 OF 2)
DATE:02-18-1992 TIME:15:51:09
Rt. 2A/Bedford Rd./Virginia Rd. PM 95 nb

LAST DATASETS LOADED OR SAVED
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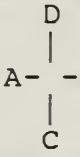
KEY:



GENERAL CHARACTERISTICS
POPULATION GREATER THAN 250,000: YES
CONTROLS: FROM C: STOP
FROM D: STOP
PREVAILING SPEED: 40 MPH
MAIN STREET # OF LANES: 2 LANES
MAIN STREET APPROACH A - EXCLUSIVE RIGHT TURN LANE: NO
MAIN STREET APPROACH B - EXCLUSIVE RIGHT TURN LANE: NO

APPROACH: C: BEDFORD RD
EXCLUSIVE LEFT TURN LANES: NO
EXCLUSIVE RIGHT TURN LANES: NO
LARGE RIGHT TURN RADIUS OR SHALLOW RIGHT TURN ANGLE: YES
RIGHT TURN ACCELERATION LANE ON MAJOR: NO

APPROACH: D: VIRGINIA RD
EXCLUSIVE LEFT TURN LANES: NO
EXCLUSIVE RIGHT TURN LANES: NO
LARGE RIGHT TURN RADIUS OR SHALLOW RIGHT TURN ANGLE: NO
RIGHT TURN ACCELERATION LANE ON MAJOR: NO

SIGHT DISTANCE RESTRICTIONS (in seconds)

APPROACH	A: RT 2A EB	B: RT 2A WB	C: BEDFORD RD	D: VIRGINIA RD
LEFTS	0.00	0.00	0.00	0.00
THRUS	0.00	0.00	0.00	0.00
RIGHTS	0.00	0.00	0.00	0.00

APPROACH	A: RT 2A EB			B: RT 2A WB			C: BEDFORD RD			D: VIRGINIA RD		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
VOLUME	0	534	33	160	1196	0	43	2	113	0	6	0
PHF	0.90			0.90			0.90			0.90		
ADJ VOLUME	0	593	37	178	1329	0	48	2	126	0	7	0
PERCENT GRADE	0.00			0.00			-1.00			3.00		
PASS CAR/HR	0			196			50	2	132	0	10	0

STEP 1 RIGHT TURNS FROM	C:BEDFORD RD	D:VIRGINIA RD
CONFLICTING FLOWS	612	1329
CRITICAL GAPS	4.9	5.4
CAPACITY	650	215
CAPACITY USED	20%	0%
IMPEDANCE FACTOR	0.86	1.00
ACTUAL CAPACITY	650	215

DATE:02-18-1992 TIME:15:51:09
Rt. 2A/Bedford Rd./Virginia Rd. PM 95 nb

STEP 2 LEFT TURNS FROM	B:RT 2A WB	A:RT 2A EB
CONFLICTING FLOWS	630	1329
CRITICAL GAPS	4.7	4.7
CAPACITY	677	297
CAPACITY USED	29%	0%
IMPEDANCE FACTOR	0.78	1.00
ACTUAL CAPACITY	677	297

STEP 3 THRU MOVES FROM	C:BEDFORD RD	D:VIRGINIA RD
CONFLICTING FLOWS	2118	2137
CRITICAL GAPS	6.1	6.1
CAPACITY	37	35
CAPACITY USED	6%	29%
IMPEDANCE FACTOR	0.96	0.78
ACTUAL CAPACITY	29	28

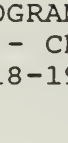
STEP 4 LEFT TURNS FROM	C:BEDFORD RD	D:VIRGINIA RD
CONFLICTING FLOWS	2125	2264
CRITICAL GAPS	6.6	6.6
CAPACITY	27	19
ACTUAL CAPACITY	16	12

SUMMARY OF LEVEL OF SERVICE BY MOVEMENT

MOVEMENT	DEMAND	CAPACITY	RESERVE	LOS	AVG DEL(SEC)	AVG QUEUE
LT FROM B:	196	677	481	A	7.48	0.41
ALL MOVES FROM C:	184	54	-130	F	INFINITE	INFINITE
ALL MOVES FROM D:	10	28	17	E	208.00	0.60

CINCH PROGRAM VERSION DATE 4-29-1988
1985 HCM - CHAPTER 10: UNSIGNALIZED - 4 APPROACHES (PAGE 1 OF 2)
DATE:02-18-1992 TIME:15:57:58
Build

LAST DATASETS LOADED OR SAVED
VOLUME=24pm95b GEOMETRICS=24pm95b
KEY:



GENERAL CHARACTERISTICS
POPULATION GREATER THAN 250,000: YES
CONTROLS: FROM C: STOP
FROM D: STOP
PREVAILING SPEED: 40 MPH
MAIN STREET # OF LANES: 2 LANES
MAIN STREET APPROACH A - EXCLUSIVE RIGHT TURN LANE: NO
MAIN STREET APPROACH B - EXCLUSIVE RIGHT TURN LANE: NO

APPROACH: C: BEDFORD RD
EXCLUSIVE LEFT TURN LANES: NO
EXCLUSIVE RIGHT TURN LANES: NO
LARGE RIGHT TURN RADIUS OR SHALLOW RIGHT TURN ANGLE: YES
RIGHT TURN ACCELERATION LANE ON MAJOR: NO

APPROACH: D: VIRGINIA RD
EXCLUSIVE LEFT TURN LANES: NO
EXCLUSIVE RIGHT TURN LANES: NO
LARGE RIGHT TURN RADIUS OR SHALLOW RIGHT TURN ANGLE: NO
RIGHT TURN ACCELERATION LANE ON MAJOR: NO

SIGHT DISTANCE RESTRICTIONS (in seconds)

APPROACH	A: RT 2A EB	B: RT 2A WB	C: BEDFORD RD	D: VIRGINIA RD
LEFTS	0.00	0.00	0.00	0.00
THRUS	0.00	0.00	0.00	0.00
RIGHTS	0.00	0.00	0.00	0.00

APPROACH	A: RT 2A EB			B: RT 2A WB			C: BEDFORD RD			D: VIRGINIA RD		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
VOLUME	0	536	33	160	1217	0	43	2	113	0	6	0
PHF	0.90			0.90			0.90			0.90		
ADJ VOLUME	0	596	37	178	1352	0	48	2	126	0	7	0
PERCENT GRADE	0.00			0.00			-1.00			3.00		
PASS CAR/HR	0			196			50	2	132	0	10	0

STEP 1 RIGHT TURNS FROM	C:BEDFORD RD	D:VIRGINIA RD
CONFLICTING FLOWS	614	1352
CRITICAL GAPS	4.9	5.4
CAPACITY	648	208
CAPACITY USED	20%	0%
IMPEDANCE FACTOR	0.86	1.00
ACTUAL CAPACITY	648	208

DATE:02-18-1992 TIME:15:57:58
Build

STEP 2 LEFT TURNS FROM	B:RT 2A WB	A:RT 2A EB
CONFLICTING FLOWS	632	1352
CRITICAL GAPS	4.7	4.7
CAPACITY	675	288
CAPACITY USED	29%	0%
IMPEDANCE FACTOR	0.78	1.00
ACTUAL CAPACITY	675	288

STEP 3 THRU MOVES FROM	C:BEDFORD RD	D:VIRGINIA RD
CONFLICTING FLOWS	2144	2162
CRITICAL GAPS	6.1	6.1
CAPACITY	35	33
CAPACITY USED	7%	31%
IMPEDANCE FACTOR	0.96	0.76
ACTUAL CAPACITY	27	26

STEP 4 LEFT TURNS FROM	C:BEDFORD RD	D:VIRGINIA RD
CONFLICTING FLOWS	2151	2290
CRITICAL GAPS	6.6	6.6
CAPACITY	25	18
ACTUAL CAPACITY	15	12

SUMMARY OF LEVEL OF SERVICE BY MOVEMENT

MOVEMENT	DEMAND	CAPACITY	RESERVE	LOS	AVG DEL(SEC)	AVG QUEUE
LT FROM B:	196	675	480	A	7.51	0.41
ALL MOVES FROM C:	184	50	-134	F	INFINITE	INFINITE
ALL MOVES FROM D:	10	26	16	E	227.85	0.65

CINCH PROGRAM VERSION DATE 4-29-1988
1985 HCM - CHAPTER 10 : UNSIGNALIZED - 3 APPROACHES (PAGE 1 of 2)
DATE:02-18-1992 TIME:10:15:41
ROUTE 2A @ HANSCOM DRIVE

LAST DATASETS LOADED OR SAVED
VOLUME=19am90 GEOMETRICS=19(90)
KEY: A- -B
|
C
GENERAL CHARACTERISTICS
POPULATION GREATER THAN 250,000: YES
CONTROLS: FROM C: STOP
FROM C RT LANE: YIELD
PREVAILING SPEED: 40 MPH
MAIN STREET # OF LANES: 2 LANES
MAIN STREET APPROACH A - EXCLUSIVE RIGHT TURN LANE: Y

MINOR STREET LANES
APPROACH: C: HANSCOM DR
SHARED LEFT AND RIGHT TURN LANE: NO
LARGE RIGHT TURN RADIUS OR SHALLOW RIGHT TURN ANGLE: YES
RIGHT TURN ACCELERATION LANE ON MAJOR: NO

SIGHT DISTANCE RESTRICTIONS (in seconds)

APPROACH	A: RT 2A WB	B: RT 2A EB	C: HANSCOM DR
LEFTS	0.00	0.00	0.00
THRUS	0.00	0.00	0.00
RIGHTS	0.00	0.00	0.00

APPROACH	A: RT 2A WB			B: RT 2A EB			C: HANSCOM DR		
	LT	TH	RT	LT	TH	RT	LT	TH	RT
VOLUME	0	471	244	210	1052	0	80	0	71
PHF	0.90			0.90			0.90		
ADJ VOLUME	0	523	271	233	1169	0	89	0	79
PERCENT GRADE	0.00			0.00			0.00		
PASS CAR/HR	0			257			98	0	87

STEP 1 RIGHT TURNS FROM C:HANSCOM DR

CONFLICTING FLOWS	523
CRITICAL GAPS	4.2
CAPACITY	878
ACTUAL CAPACITY	878

STEP 2 LEFT TURNS FROM B:RT 2A EB

CONFLICTING FLOWS	523
CRITICAL GAPS	4.7
CAPACITY	758
CAPACITY USED	34%
IMPEDANCE FACTOR	0.73
ACTUAL CAPACITY	758

DATE:02-18-1992 TIME:10:15:41
ROUTE 2A @ HANSCOM DRIVE

STEP 3 LEFT TURNS FROM	C:HANSCOM DR
CONFLICTING FLOWS	2061
CRITICAL GAPS	6.6
CAPACITY	31
ACTUAL CAPACITY	22

SUMMARY OF LEVEL OF SERVICE BY MOVEMENT

MOVEMENT	DEMAND	CAPACITY	RESERVE	LOS	AVG DEL(SEC)	AVG QUEUE
LT FROM B:	257	758	501	A	7.18	0.51
LT FROM C:	98	22	-75	F	INFINITE	INFINITE
RT FROM C:	87	878	791	A	4.55	0.12

CINCH PROGRAM VERSION DATE 1-12-1987
1985 HCM - CHAPTER 10 : UNSIGNALIZED - 3 APPROACHES (PAGE 1 of 2)
DATE:08-20-1991 TIME:17:25:36
ROUTE 2A @ HANSCOM DRIVE

AM 95 nb.

LAST DATASETS LOADED OR SAVED
VOLUME=19am95 GEOMETRICS=19(95)
KEY: A- -B
|
C

GENERAL CHARACTERISTICS
POPULATION GREATER THAN 250,000: YES
CONTROLS: FROM C: STOP
FROM C RT LANE: YIELD
PREVAILING SPEED: 40 MPH
MAIN STREET # OF LANES: 2 LANES
MAIN STREET APPROACH A - EXCLUSIVE RIGHT TURN LANE: Y

MINOR STREET LANES
APPROACH: C: HANSCOM DR
SHARED LEFT AND RIGHT TURN LANE: NO
LARGE RIGHT TURN RADIUS OR SHALLOW RIGHT TURN ANGLE: YES
RIGHT TURN ACCELERATION LANE ON MAJOR: NO

SIGHT DISTANCE RESTRICTIONS (in seconds)

APPROACH	A: RT 2A WB	B: RT 2A EB	C: HANSCOM DR
LEFTS	0.00	0.00	0.00
THRUS	0.00	0.00	0.00
RIGHTS	0.00	0.00	0.00

APPROACH	A: RT 2A WB			B: RT 2A EB			C: HANSCOM DR		
	LT	TH	RT	LT	TH	RT	LT	TH	RT
VOLUME	0	600	308	201	1085	0	118	0	69
PHF	0.90			0.90			0.90		
ADJ VOLUME	0	667	342	223	1206	0	131	0	77
PERCENT GRADE	0.00			0.00			0.00		
PASS CAR/HR	0			246			144	0	84

STEP 1 RIGHT TURNS FROM C:HANSCOM DR

CONFLICTING FLOWS	667
CRITICAL GAPS	4.2
CAPACITY	809
ACTUAL CAPACITY	809

STEP 2 LEFT TURNS FROM B:RT 2A EB

CONFLICTING FLOWS	667
CRITICAL GAPS	4.7
CAPACITY	673
CAPACITY USED	36%
IMPEDANCE FACTOR	0.71
ACTUAL CAPACITY	673

1985 HCM - CHAPTER 10 : UNSIGNALIZED - 3 APPROACHES (PAGE 2 of 2)
DATE:08-20-1991 TIME:17:25:36
ROUTE 2A @ HANSCOM DRIVE

STEP 3 LEFT TURNS FROM	C:HANSCOM DR
CONFLICTING FLOWS	2267
CRITICAL GAPS	6.6
CAPACITY	40
ACTUAL CAPACITY	28

SUMMARY OF LEVEL OF SERVICE BY MOVEMENT

MOVEMENT	DEMAND	CAPACITY	RESERVE	LOS	AVG DEL(SEC)	AVG QUEU
LT FROM B:	246	673	428	A	8.42	0.57
LT FROM C:	144	28	-116	F	INFINITE	INFINITE
RT FROM C:	84	809	724	A	4.97	0.20

CINCH PROGRAM VERSION DATE 1-12-1987
1985 HCM - CHAPTER 10 : UNSIGNALIZED - 3 APPROACHES (PAGE 1 of 2)
DATE:08-20-1991 TIME:17:31:36
Rt. 2A/Hanscom AM 1995 b

LAST DATASETS LOADED OR SAVED
VOLUME=19am95b GEOMETRICS=19(95)
KEY: A- -B
|
C

GENERAL CHARACTERISTICS
POPULATION GREATER THAN 250,000: YES
CONTROLS: FROM C: STOP
FROM C RT LANE: YIELD
PREVAILING SPEED: 40 MPH
MAIN STREET # OF LANES: 2 LANES
MAIN STREET APPROACH A - EXCLUSIVE RIGHT TURN LANE: Y

MINOR STREET LANES
APPROACH: C: HANSCOM DR
SHARED LEFT AND RIGHT TURN LANE: NO
LARGE RIGHT TURN RADIUS OR SHALLOW RIGHT TURN ANGLE: YES
RIGHT TURN ACCELERATION LANE ON MAJOR: NO

SIGHT DISTANCE RESTRICTIONS (in seconds)

APPROACH	A: RT 2A WB	B: RT 2A EB	C: HANSCOM DR
LEFTS	0.00	0.00	0.00
THRUS	0.00	0.00	0.00
RIGHTS	0.00	0.00	0.00

APPROACH	A: RT 2A WB			B: RT 2A EB			C: HANSCOM DR		
	LT	TH	RT	LT	TH	RT	LT	TH	RT
VOLUME	0	602	308	229	1094	0	118	0	70
PHF	0.90			0.90			0.90		
ADJ VOLUME	0	669	342	254	1216	0	131	0	78
PERCENT GRADE	0.00			0.00			0.00		
PASS CAR/HR	0			280			144	0	86

STEP 1 RIGHT TURNS FROM C:HANSCOM DR

CONFLICTING FLOWS	669
CRITICAL GAPS	4.2
CAPACITY	807
ACTUAL CAPACITY	807

STEP 2 LEFT TURNS FROM B:RT 2A EB

CONFLICTING FLOWS	669
CRITICAL GAPS	4.7
CAPACITY	672
CAPACITY USED	42%
IMPEDANCE FACTOR	0.66
ACTUAL CAPACITY	672

1985 HCM - CHAPTER 10 : UNSIGNALIZED - 3 APPROACHES (PAGE 2 of 2)
DATE:08-20-1991 TIME:17:31:36
Rt. 2A/Hanscom AM 1995 b

STEP 3 LEFT TURNS FROM	C:HANSCOM DR
CONFLICTING FLOWS	2310
CRITICAL GAPS	6.6
CAPACITY	37
ACTUAL CAPACITY	25

SUMMARY OF LEVEL OF SERVICE BY MOVEMENT

MOVEMENT	DEMAND	CAPACITY	RESERVE	LOS	AVG DEL(SEC)	AVG QUEU
LT FROM B:	280	672	392	B	9.18	0.71
LT FROM C:	144	25	-120	F	INFINITE	INFINITE
RT FROM C:	86	807	721	A	4.99	0.20

CINCH PROGRAM VERSION DATE 4-29-1988
1985 HCM - CHAPTER 9: SIGNALIZED - OPERATIONAL ANALYSIS
Rt. 2A/Hanscom Dr. PM
Poli. Officer Sim. Optimal
date:08-17-1991 time:13:57:52
LAST DATA SET NAMES LOADED OR SAVED
VOLUME=19pm90 GEOMETRICS=19pm90 SIGNAL=19pm90o
LOCATED IN CBD:n
VOLUME & GEOMETRICS

	VOLUMES			# OF LANES			LANE WIDTH			CROSS
DIR	LT	TH	RT	LT	TH	RT	LT	TH	RT	WALK
EB	104	524	0	1	1	0	12.0	12.0	0.0	0
WB	0	1135	148	0	1	1	0.0	12.0	12.0	0
NB	0	0	0	0	0	0	0.0	0.0	0.0	0
SB	228	0	241	1	0	1	12.0	0.0	12.0	0

TRAFFIC & ROADWAY CONDITIONS

			ADJ PARK			PEDESTRIANS				ARR
DIR	GRADE	%HV	Y/N	MOVES	BUSES	PHF	CROSS	BUT	MIN TIME	TYPE
EB	0.0%	0.0%	N	0	0	.900	0	n	7.0	3
WB	0.0%	0.0%	N	0	0	.900	0	n	7.0	3
NB	0.0%	0.0%		0	0	.000	0		7.0	0
SB	0.0%	0.0%	N	0	0	.900	0	n	7.0	3

PHASINGS

	EASTBOUND				WESTBOUND				NORTHBOUND				SOUTHBOUND				GREEN	Y+R	PRE/ACT
	l	t	r	p	l	t	r	p	l	t	r	p	l	t	r	p			
1	*	*													*		6.3	2	A
2		*				*	*										65.1	2	A
3														*		*	13.8	2	A

CYCLE= 91.2

VOLUME ADJUSTMENT WORKSHEET
PART 1 (MOVEMENT ADJUSTMENTS)

DIR	LTV	THV	RTV	PHF	LTFR	THFR	RTFR
EB	104	524	0	.900	116	582	0
WB	0	1135	148	.900	0	1261	164
NB	0	0	0	.000	0	0	0
SB	228	0	241	.900	253	0	268

PART 2 (LANE GROUP ADJUSTMENTS)

DIR	LN GROUP	FLOW	N	LU	v	Plt	Prt
EB	LT	116	1	1.00	116	1.00	0.00
EB	TH	582	1	1.00	582	0.00	0.00
WB	TH	1261	1	1.00	1261	0.00	0.00
WB	RT	164	1	1.00	164	0.00	1.00
SB	LT	253	1	1.00	253	1.00	0.00
SB	RT	268	1	1.00	268	0.00	1.00

PART 3 (OPPOSING VOLUME ADJUSTMENTS)

LEFT TURN	OPPOSING APPROACH									
BEING OPPOSED	VOLUMES			% OPPOSING LEFT TURN			# LANES			OPPOSING
	LT	TH	RT	LT	TH	RT	LT	TH	RT	VOLUME
EASTBOUND	0	1261	164	0	0	0	0	1	1	0
SOUTHBOUND	0	0	0	0	0	0	0	0	0	0

SATURATION FLOW ADJUSTMENT WORKSHEET

DIR	LN GROUP	IDEAL	N	Fwid	Fhv	Fgr	Fpark	Fbus	Farea	Frt	Flt	s
EB	LT	1800	1	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.950	1710
EB	TH	1800	1	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1800
WB	TH	1800	1	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1800
WB	RT	1800	1	1.000	1.000	1.000	1.000	1.000	1.000	0.850	1.000	1530
SB	LT	1800	1	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.950	1710
SB	RT	1800	1	1.000	1.000	1.000	1.000	1.000	1.000	0.850	1.000	1530

CAPACITY ANALYSIS WORKSHEET

DIR	LN GROUP	v	s	v/s	g/C	c	v/c	CRITICAL
EB	LT	116	1710	0.07	0.07	118	0.98	*
EB	TH	582	1800	0.32	0.81	1449	0.40	
WB	TH	1261	1800	0.70	0.71	1286	0.98	*
WB	RT	164	1530	0.11	0.71	1093	0.15	
SB	LT	253	1710	0.15	0.15	258	0.98	*
SB	RT	268	1530	0.18	0.24	370	0.72	

CYCLE= 91.2 LOST= 6.0 SUM V/S CRIT= 0.92 TOTAL V/C= 0.98

LEVEL OF SERVICE WORKSHEET

DIR	LN GROUP	v/c	g/C	C	d1	c	d2	PF	Delay	LOS	Avg Q	95% Q
EB	LT	0.98	0.07	91.2	32.22	118	57.65	1.00	89.87	F	4.2	
EB	TH	0.40	0.81	91.2	1.95	1449	0.10	0.85	1.74	A	2.9	
WB	TH	0.98	0.71	91.2	9.45	1286	15.48	0.85	21.19	C	12.0	
WB	RT	0.15	0.71	91.2	3.17	1093	0.01	0.85	2.70	A	1.2	
SB	LT	0.98	0.15	91.2	29.32	258	37.97	1.00	67.29	F	7.5	
SB	RT	0.72	0.24	91.2	24.15	370	4.69	0.85	24.51	C	5.1	

DIR	Delay	LOS
EB	16.34	C
WB	19.06	C
SB	45.31	E

INTERSECTION DELAY = 23.51 INTERSECTION LOS=C

THE CYCLE LENGTH WITHIN THE BOUNDS OF 60 TO 120 SECONDS
WHICH MINIMIZES CRITICAL MOVEMENT DELAY IS 91.2 SECONDS

FOR A V/C RATIO OF .95 THE CYCLE SHOULD BE 169.3 SECONDS
THE EXISTING TIMING IS OPTIMAL

CINCH PROGRAM VERSION DATE 4-29-1988
1985 HCM - CHAPTER 9: SIGNALIZED - OPERATIONAL ANALYSIS
Rt. 2A/Hanscom Dr. PM 95 nb
Poli. Officer Sim. Optimal
date:08-19-1991 time:23:16:03
LAST DATA SET NAMES LOADED OR SAVED
VOLUME=19pm95n GEOMETRICS=19pm95n SIGNAL=19pm95n
LOCATED IN CBD:n
VOLUME & GEOMETRICS

	VOLUMES			# OF LANES			LANE WIDTH			CROSS
DIR	LT	TH	RT	LT	TH	RT	LT	TH	RT	WALK
EB	104	543	0	1	1	0	12.0	12.0	0.0	0
WB	0	1115	148	0	1	1	0.0	12.0	12.0	0
NB	0	0	0	0	0	0	0.0	0.0	0.0	0
SB	228	0	241	1	0	1	12.0	0.0	12.0	0

TRAFFIC & ROADWAY CONDITIONS

			ADJ PARK			PEDESTRIANS				ARR
DIR	GRADE	%HV	Y/N	MOVES	BUSES	PHF	CROSS	BUT	MIN TIME	TYPE
EB	0.0%	0.0%	N	0	0	.900	0	n	7.0	3
WB	0.0%	0.0%	N	0	0	.900	0	n	7.0	3
NB	0.0%	0.0%		0	0	.000	0		7.0	0
SB	0.0%	0.0%	N	0	0	.900	0	n	7.0	3

PHASINGS

	EASTBOUND				WESTBOUND				NORTHBOUND				SOUTHBOUND				GREEN	Y+R	PRE/ACT
	l	t	r	p	l	t	r	p	l	t	r	p	l	t	r	p			
1	*	*													*		6.0	2	A
2		*				*	*										61.2	2	A
3														*		*	13.2	2	A

CYCLE= 86.4

VOLUME ADJUSTMENT WORKSHEET
PART 1 (MOVEMENT ADJUSTMENTS)

DIR	LTV	THV	RTV	PHF	LTFR	THFR	RTFR
EB	104	543	0	.900	116	603	0
WB	0	1115	148	.900	0	1239	164
NB	0	0	0	.000	0	0	0
SB	228	0	241	.900	253	0	268

PART 2 (LANE GROUP ADJUSTMENTS)

DIR	LN GROUP	FLOW	N	LU	v	Plt	Prt
EB	LT	116	1	1.00	116	1.00	0.00
EB	TH	603	1	1.00	603	0.00	0.00
WB	TH	1239	1	1.00	1239	0.00	0.00
WB	RT	164	1	1.00	164	0.00	1.00
SB	LT	253	1	1.00	253	1.00	0.00
SB	RT	268	1	1.00	268	0.00	1.00

PART 3 (OPPOSING VOLUME ADJUSTMENTS)

LEFT TURN	OPPOSING APPROACH									
BEING OPPOSED	VOLUMES			% OPPOSING LEFT TURN			# LANES			OPPOSING
	LT	TH	RT	LT	TH	RT	LT	TH	RT	VOLUME
EASTBOUND	0	1239	164	0	0	0	0	1	1	0
SOUTHBOUND	0	0	0	0	0	0	0	0	0	0

SATURATION FLOW ADJUSTMENT WORKSHEET

DIR	LN GROUP	IDEAL	N	Fwid	Fhv	Fgr	Fpark	Fbus	Farea	Frt	Flt	s
EB	LT	1800	1	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.950	1710
EB	TH	1800	1	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1800
WB	TH	1800	1	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1800
WB	RT	1800	1	1.000	1.000	1.000	1.000	1.000	1.000	0.850	1.000	1530
SB	LT	1800	1	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.950	1710
SB	RT	1800	1	1.000	1.000	1.000	1.000	1.000	1.000	0.850	1.000	1530

CAPACITY ANALYSIS WORKSHEET

DIR	LN GROUP	v	s	v/s	g/C	c	v/c	CRITICAL
EB	LT	116	1710	0.07	0.07	119	0.97	*
EB	TH	603	1800	0.34	0.80	1442	0.42	
WB	TH	1239	1800	0.69	0.71	1275	0.97	*
WB	RT	164	1530	0.11	0.71	1084	0.15	
SB	LT	253	1710	0.15	0.15	261	0.97	*
SB	RT	268	1530	0.18	0.25	375	0.71	

CYCLE= 86.4 LOST= 6.0 SUM V/S CRIT= 0.90 TOTAL V/C= 0.97

LEVEL OF SERVICE WORKSHEET

DIR	LN GROUP	v/c	g/C	C	d1	c	d2	PF	Delay	LOS	Avg Q	95% Q
EB	LT	0.97	0.07	86.4	30.48	119	54.54	1.00	85.02	F	4.0	9
EB	TH	0.42	0.80	86.4	1.95	1442	0.12	0.85	1.76	A	2.9	3
WB	TH	0.97	0.71	86.4	8.95	1275	13.96	0.85	19.47	C	11.0	21
WB	RT	0.15	0.71	86.4	3.13	1084	0.01	0.85	2.66	A	1.2	1
SB	LT	0.97	0.15	86.4	27.68	261	35.47	1.00	63.15	F	7.0	14
SB	RT	0.71	0.25	86.4	22.67	375	4.32	0.85	22.94	C	4.9	6

DIR	Delay	LOS
EB	15.15	C
WB	17.50	C
SB	42.49	E

INTERSECTION DELAY = 21.79 INTERSECTION LOS=C

THE CYCLE LENGTH WITHIN THE BOUNDS OF 60 TO 120 SECONDS
WHICH MINIMIZES CRITICAL MOVEMENT DELAY IS 86.4 SECONDS

FOR A V/C RATIO OF .95 THE CYCLE SHOULD BE 123.9 SECONDS
THE EXISTING TIMING IS OPTIMAL

CINCH PROGRAM VERSION DATE 4-29-1988
1985 HCM - CHAPTER 9: SIGNALIZED - OPERATIONAL ANALYSIS
Rt. 2A/Hanscom Dr. pm95 b
Poli. Officer Sim. Optimal
date:08-19-1991 time:23:19:24
LAST DATA SET NAMES LOADED OR SAVED
VOLUME=19pm95b GEOMETRICS=19pm95b SIGNAL=19pm95b
LOCATED IN CBD:n
VOLUME & GEOMETRICS

	VOLUMES			# OF LANES			LANE WIDTH			CROSS
DIR	LT	TH	RT	LT	TH	RT	LT	TH	RT	WALK
EB	106	543	0	1	1	0	12.0	12.0	0.0	0
WB	0	1123	148	0	1	1	0.0	12.0	12.0	0
NB	0	0	0	0	0	0	0.0	0.0	0.0	0
SB	228	0	254	1	0	1	12.0	0.0	12.0	0

TRAFFIC & ROADWAY CONDITIONS

			ADJ PARK			PEDESTRIANS				ARR
DIR	GRADE	%HV	Y/N	MOVES	BUSES	PHF	CROSS	BUT	MIN TIME	TYPE
EB	0.0%	0.0%	N	0	0	.900	0	n	7.0	3
WB	0.0%	0.0%	N	0	0	.900	0	n	7.0	3
NB	0.0%	0.0%		0	0	.000	0		7.0	0
SB	0.0%	0.0%	N	0	0	.900	0	n	7.0	3

PHASINGS

	EASTBOUND				WESTBOUND				NORTHBOUND				SOUTHBOUND				GREEN	Y+R	PRE/ACT
	l	t	r	p	l	t	r	p	l	t	r	p	l	t	r	p			
1	*	*													*		6.3	2	A
2		*				*	*										63.0	2	A
3														*		*	13.5	2	A

CYCLE= 88.7

VOLUME ADJUSTMENT WORKSHEET
PART 1 (MOVEMENT ADJUSTMENTS)

DIR	LTV	THV	RTV	PHF	LTFR	THFR	RTFR
EB	106	543	0	.900	118	603	0
WB	0	1123	148	.900	0	1248	164
NB	0	0	0	.000	0	0	0
SB	228	0	254	.900	253	0	282

PART 2 (LANE GROUP ADJUSTMENTS)

DIR	LN GROUP	FLOW	N	LU	v	Plt	Prt
EB	LT	118	1	1.00	118	1.00	0.00
EB	TH	603	1	1.00	603	0.00	0.00
WB	TH	1248	1	1.00	1248	0.00	0.00
WB	RT	164	1	1.00	164	0.00	1.00
SB	LT	253	1	1.00	253	1.00	0.00
SB	RT	282	1	1.00	282	0.00	1.00

PART 3 (OPPOSING VOLUME ADJUSTMENTS)

LEFT TURN	OPPOSING APPROACH									
BEING OPPOSED	VOLUMES			% OPPOSING LEFT TURN			# LANES			OPPOSING
	LT	TH	RT	LT	TH	RT	LT	TH	RT	VOLUME
EASTBOUND	0	1248	164	0	0	0	0	1	1	0
SOUTHBOUND	0	0	0	0	0	0	0	0	0	0

SATURATION FLOW ADJUSTMENT WORKSHEET

DIR	LN GROUP	IDEAL	N	Fwid	Fhv	Fgr	Fpark	Fbus	Farea	Frt	Flt	s
EB	LT	1800	1	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.950	1710
EB	TH	1800	1	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1800
WB	TH	1800	1	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1800
WB	RT	1800	1	1.000	1.000	1.000	1.000	1.000	1.000	0.850	1.000	1530
SB	LT	1800	1	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.950	1710
SB	RT	1800	1	1.000	1.000	1.000	1.000	1.000	1.000	0.850	1.000	1530

CAPACITY ANALYSIS WORKSHEET

DIR	LN GROUP	v	s	v/s	g/C	c	v/c	CRITICAL
EB	LT	118	1710	0.07	0.07	121	0.98	*
EB	TH	603	1800	0.34	0.80	1446	0.42	
WB	TH	1248	1800	0.69	0.71	1278	0.98	*
WB	RT	164	1530	0.11	0.71	1086	0.15	
SB	LT	253	1710	0.15	0.15	259	0.98	*
SB	RT	282	1530	0.18	0.24	375	0.75	

CYCLE= 88.7 LOST= 6.0 SUM V/S CRIT= 0.91 TOTAL V/C= 0.98

LEVEL OF SERVICE WORKSHEET

DIR	LN GROUP	v/c	g/C	C	d1	c	d2	PF	Delay	LOS	Avg Q	95% Q
EB	LT	0.98	0.07	88.7	31.27	121	55.55	1.00	86.82	F	4.2	9
EB	TH	0.42	0.80	88.7	1.96	1446	0.12	0.85	1.77	A	2.9	3
WB	TH	0.98	0.71	88.7	9.24	1278	14.73	0.85	20.37	C	11.5	22
WB	RT	0.15	0.71	88.7	3.17	1086	0.01	0.85	2.70	A	1.2	1
SB	LT	0.98	0.15	88.7	28.47	259	36.73	1.00	65.20	F	7.2	15
SB	RT	0.75	0.24	88.7	23.57	375	5.73	0.85	24.90	C	5.3	7

DIR	Delay	LOS
EB	15.66	C
WB	18.31	C
SB	43.96	E

INTERSECTION DELAY = 22.75 INTERSECTION LOS=C

THE CYCLE LENGTH WITHIN THE BOUNDS OF 60 TO 120 SECONDS
WHICH MINIMIZES CRITICAL MOVEMENT DELAY IS 88.7 SECONDS

FOR A V/C RATIO OF .95 THE CYCLE SHOULD BE 143.3 SECONDS
THE EXISTING TIMING IS OPTIMAL

CINCH PROGRAM VERSION DATE 1-12-1987
1985 HCM - CHAPTER 10 : UNSIGNALIZED - 3 APPROACHES (PAGE 1 of 2)
DATE:08-21-1991 TIME:21:37:16
ROUTE 2A @ AIRPORT RD

LAST DATASETS LOADED OR SAVED
VOLUME=29am90 GEOMETRICS=29am90
KEY: A- -B
|
C

GENERAL CHARACTERISTICS
POPULATION GREATER THAN 250,000: YES
CONTROLS: FROM C: STOP
PREVAILING SPEED: 40 MPH
MAIN STREET # OF LANES: 2 LANES
MAIN STREET APPROACH A - EXCLUSIVE RIGHT TURN LANE: N

MINOR STREET LANES
APPROACH: C: AIRPORT RD
SHARED LEFT AND RIGHT TURN LANE: YES
LARGE RIGHT TURN RADIUS OR SHALLOW RIGHT TURN ANGLE: NO
RIGHT TURN ACCELERATION LANE ON MAJOR: NO

SIGHT DISTANCE RESTRICTIONS (in seconds)

APPROACH	A: RT 2A WB	B: RT 2A EB	C: AIRPORT RD
LEFTS	0.00	0.00	0.00
THRUS	0.00	0.00	0.00
RIGHTS	0.00	0.00	0.00

APPROACH	A: RT 2A WB			B: RT 2A EB			C: AIRPORT RD		
	LT	TH	RT	LT	TH	RT	LT	TH	RT
VOLUME	0	698	325	60	971	0	14	0	7
PHF	0.90			0.90			0.90		
ADJ VOLUME	0	776	361	67	1079	0	16	0	8
PERCENT GRADE	0.00			0.00			0.00		
PASS CAR/HR	0			73			17	0	9

STEP 1 RIGHT TURNS FROM C:AIRPORT RD

CONFLICTING FLOWS	956
CRITICAL GAPS	5.4
CAPACITY	382
ACTUAL CAPACITY	382

STEP 2 LEFT TURNS FROM B:RT 2A EB

CONFLICTING FLOWS	1137
CRITICAL GAPS	4.7
CAPACITY	423
CAPACITY USED	17%
IMPEDANCE FACTOR	0.88
ACTUAL CAPACITY	423

1985 HCM - CHAPTER 10 : UNSIGNALIZED - 3 APPROACHES (PAGE 2 of 2)
DATE:08-21-1991 TIME:21:37:16
ROUTE 2A @ AIRPORT RD

STEP 3 LEFT TURNS FROM	C:AIRPORT RD
CONFLICTING FLOWS	2102
CRITICAL GAPS	6.6
CAPACITY	50
ACTUAL CAPACITY	44

SUMMARY OF LEVEL OF SERVICE BY MOVEMENT

MOVEMENT	DEMAND	CAPACITY	RESERVE	LOS	AVG DEL(SEC)	AVG QUEU
LT FROM B:	73	423	349	B	10.31	0.21
ALL MOVES FROM C:	26	62	37	E	98.47	0.70

CINCH PROGRAM VERSION DATE 1-12-1987
1985 HCM - CHAPTER 10 : UNSIGNALIZED - 3 APPROACHES (PAGE 1 of 2)
DATE:08-21-1991 TIME:21:40:28
Rt. 2A/Airport Rd. am 1995

LAST DATASETS LOADED OR SAVED
VOLUME=29am95 GEOMETRICS=29am95
KEY: A- -B
|
C

GENERAL CHARACTERISTICS
POPULATION GREATER THAN 250,000: YES
CONTROLS: FROM C: STOP
PREVAILING SPEED: 40 MPH
MAIN STREET # OF LANES: 2 LANES
MAIN STREET APPROACH A - EXCLUSIVE RIGHT TURN LANE: N

MINOR STREET LANES
APPROACH: C: AIRPORT RD
SHARED LEFT AND RIGHT TURN LANE: YES
LARGE RIGHT TURN RADIUS OR SHALLOW RIGHT TURN ANGLE: NO
RIGHT TURN ACCELERATION LANE ON MAJOR: NO

SIGHT DISTANCE RESTRICTIONS (in seconds)

APPROACH	A: RT 2A WB	B: RT 2A EB	C: AIRPORT RD
LEFTS	0.00	0.00	0.00
THRUS	0.00	0.00	0.00
RIGHTS	0.00	0.00	0.00

APPROACH	A: RT 2A WB			B: RT 2A EB			C: AIRPORT RD		
	LT	TH	RT	LT	TH	RT	LT	TH	RT
VOLUME	0	832	312	59	1016	0	17	0	8
PHF	0.90			0.90			0.90		
ADJ VOLUME	0	924	347	66	1129	0	19	0	9
PERCENT GRADE	0.00			0.00			0.00		
PASS CAR/HR	0			72			21	0	10

STEP 1 RIGHT TURNS FROM C:AIRPORT RD

CONFLICTING FLOWS	1098
CRITICAL GAPS	5.4
CAPACITY	325
ACTUAL CAPACITY	325

STEP 2 LEFT TURNS FROM B:RT 2A EB

CONFLICTING FLOWS	1271
CRITICAL GAPS	4.7
CAPACITY	370
CAPACITY USED	19%
IMPEDANCE FACTOR	0.86
ACTUAL CAPACITY	370

1985 HCM - CHAPTER 10 : UNSIGNALIZED - 3 APPROACHES (PAGE 2 of 2)
DATE:08-21-1991 TIME:21:40:28
Rt. 2A/Airport Rd. am 1995

STEP 3 LEFT TURNS FROM	C:AIRPORT RD
CONFLICTING FLOWS	2292
CRITICAL GAPS	6.6
CAPACITY	38
ACTUAL CAPACITY	33

SUMMARY OF LEVEL OF SERVICE BY MOVEMENT

MOVEMENT	DEMAND	CAPACITY	RESERVE	LOS	AVG DEL(SEC)	AVG QUEUE
LT FROM B:	72	370	298	C	12.09	0.24
ALL MOVES FROM C:	31	46	16	E	229.17	1.95

CINCH PROGRAM VERSION DATE 1-12-1987
1985 HCM - CHAPTER 10 : UNSIGNALIZED - 3 APPROACHES (PAGE 1 of 2)
DATE:08-21-1991 TIME:21:42:01
Rt. 2A/Airport Rd. am 1995 b

LAST DATASETS LOADED OR SAVED
VOLUME=29am95b GEOMETRICS=29am95b
KEY: A- -B
|
C
GENERAL CHARACTERISTICS
POPULATION GREATER THAN 250,000: YES
CONTROLS: FROM C: STOP
PREVAILING SPEED: 40 MPH
MAIN STREET # OF LANES: 2 LANES
MAIN STREET APPROACH A - EXCLUSIVE RIGHT TURN LANE: N

MINOR STREET LANES
APPROACH: C: AIRPORT RD
SHARED LEFT AND RIGHT TURN LANE: YES
LARGE RIGHT TURN RADIUS OR SHALLOW RIGHT TURN ANGLE: NO
RIGHT TURN ACCELERATION LANE ON MAJOR: NO

SIGHT DISTANCE RESTRICTIONS (in seconds)

APPROACH	A: RT 2A WB	B: RT 2A EB	C: AIRPORT RD
LEFTS	0.00	0.00	0.00
THRUS	0.00	0.00	0.00
RIGHTS	0.00	0.00	0.00

APPROACH	A: RT 2A WB			B: RT 2A EB			C: AIRPORT RD		
	LT	TH	RT	LT	TH	RT	LT	TH	RT
VOLUME	0	832	366	68	1016	0	17	0	10
PHF	0.90			0.90			0.90		
ADJ VOLUME	0	924	407	76	1129	0	19	0	11
PERCENT GRADE	0.00			0.00			0.00		
PASS CAR/HR	0			83			21	0	12

STEP 1 RIGHT TURNS FROM C:AIRPORT RD

CONFLICTING FLOWS	1128
CRITICAL GAPS	5.4
CAPACITY	314
ACTUAL CAPACITY	314

STEP 2 LEFT TURNS FROM B:RT 2A EB

CONFLICTING FLOWS	1331
CRITICAL GAPS	4.7
CAPACITY	348
CAPACITY USED	24%
IMPEDANCE FACTOR	0.83
ACTUAL CAPACITY	348

DATE:08-21-1991 TIME:21:42:01
Rt. 2A/Airport Rd. am 1995 b

STEP 3 LEFT TURNS FROM	C:AIRPORT RD
CONFLICTING FLOWS	2332
CRITICAL GAPS	6.6
CAPACITY	36
ACTUAL CAPACITY	30

SUMMARY OF LEVEL OF SERVICE BY MOVEMENT

MOVEMENT	DEMAND	CAPACITY	RESERVE	LOS	AVG DEL(SEC)	AVG QUEUE
LT FROM B:	83	348	265	C	13.57	0.31
ALL MOVES FROM C:	33	45	12	E	303.53	2.78

CINCH PROGRAM VERSION DATE 4-29-1988
1985 HCM - CHAPTER 9: SIGNALIZED - OPERATIONAL ANALYSIS
AIRPORT RD. @ RT. 2A 1990 PM
SIMULATED POLICE CONTROL
date:02-18-1992 time:10:20:01
LAST DATA SET NAMES LOADED OR SAVED
VOLUME=29pm90 GEOMETRICS=29pm90 SIGNAL=29pm90o
LOCATED IN CBD:N
VOLUME & GEOMETRICS

	VOLUMES			# OF LANES			LANE WIDTH			CROSS
DIR	LT	TH	RT	LT	TH	RT	LT	TH	RT	WALK
EB	2	689	0	0	1	0	0.0	12.0	0.0	0
WB	0	1149	18	0	1	0	0.0	12.0	0.0	0
NB	0	0	0	0	0	0	0.0	0.0	0.0	0
SB	184	0	34	0	1	0	0.0	12.0	0.0	0

TRAFFIC & ROADWAY CONDITIONS

			ADJ PARK			PEDESTRIANS				ARR
DIR	GRADE	%HV	Y/N	MOVES	BUSES	PHF	CROSS	BUT	MIN TIME	TYPE
EB	0.0%	0.0%	N	0	0	.900	0	N	7.0	3
WB	0.0%	0.0%	N	0	0	.900	0	N	7.0	3
NB	0.0%	0.0%		0	0	.000	0		7.0	0
SB	0.0%	0.0%		0	0	.900	0	N	7.0	3

PHASINGS

	EASTBOUND				WESTBOUND				NORTHBOUND				SOUTHBOUND				GREEN	Y+R	PRE/ACT
	l	t	r	p	l	t	r	p	l	t	r	p	l	t	r	p			
1	*	*				*	*										83.8	2	A
2													*		*		20.4	2	A

CYCLE= 108.2

VOLUME ADJUSTMENT WORKSHEET
PART 1 (MOVEMENT ADJUSTMENTS)

DIR	LTV	THV	RTV	PHF	LTFR	THFR	RTFR
EB	2	689	0	.900	2	766	0
WB	0	1149	18	.900	0	1277	20
NB	0	0	0	.000	0	0	0
SB	184	0	34	.900	204	0	38

PART 2 (LANE GROUP ADJUSTMENTS)

DIR	LN GROUP	FLOW	N	LU	v	Plt	Prt
EB	LT-TH	768	1	1.00	768	0.00	0.00
WB	TH-RT	1297	1	1.00	1297	0.00	0.02
SB	LT-RT	242	1	1.00	242	0.84	0.16

PART 3 (OPPOSING VOLUME ADJUSTMENTS)

LEFT TURN	OPPOSING APPROACH									
BEING OPPOSED	VOLUMES			% OPPOSING LEFT TURN			# LANES			OPPOSING
	LT	TH	RT	LT	TH	RT	LT	TH	RT	VOLUME
EASTBOUND	0	1277	20	100	100	100	0	1	0	1297
SOUTHBOUND	0	0	0	0	0	0	0	0	0	0

SATURATION FLOW ADJUSTMENT WORKSHEET

DIR	LN GROUP	IDEAL	N	Fwid	Fhv	Fgr	Fpark	Fbus	Farea	Frt	Flt	s
EB	LT-TH	1800	1	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.978	1761
WB	TH-RT	1800	1	1.000	1.000	1.000	1.000	1.000	1.000	0.898	1.000	1616
SB	LT-RT	1800	1	1.000	1.000	1.000	1.000	1.000	1.000	0.879	0.786	1244

SUPPLEMENTAL WORKSHEET FOR LEFT-TURN ADJUSTMENT FACTOR FLT

INPUT VARIABLES

DIR	C	G	N	Va	Vm	Vlt	Plt	No	Vo	Plto
EB	108	84	1	768	766	2	0.00	1	1297	0.00

CALCULATIONS

DIR	Sop	Yo	Gu	Fs	Pl	Gq	Pt	Gf	El	Fm	Flt
EB	1800	0.720	21.101	0.065	0.003	62.744	0.997	59.890	17.419	0.978	0.978

CAPACITY ANALYSIS WORKSHEET

DIR	LN GROUP	v	s	v/s	g/C	c	v/c	CRITICAL
EB	LT-TH	768	1761	0.44	0.77	1365	0.56	
WB	TH-RT	1297	1616	0.80	0.77	1252	1.04	*
SB	LT-RT	242	1244	0.19	0.19	234	1.04	*

CYCLE=108.2 LOST= 4.0 SUM V/S CRIT= 1.00 TOTAL V/C= 1.04

LEVEL OF SERVICE WORKSHEET

DIR	LN GROUP	v/c	g/C	C	d1	c	d2	PF	Delay	LOS	Avg Q	95% Q
EB	LT-TH	0.56	0.77	108.2	3.69	1365	0.41	0.85	3.49	A	5.2	5
WB	TH-RT	1.04	0.77	108.2	10.54	1252	28.86	0.85	33.48	D	16.4	37
SB	LT-RT	1.04	0.19	108.2	33.66	234	56.32	1.00	89.98	F	9.0	19

DIR	Delay	LOS
EB	3.49	A
WB	33.48	D
SB	89.98	F

INTERSECTION DELAY = 29.43 INTERSECTION LOS=D

THE CYCLE LENGTH WITHIN THE BOUNDS OF 60 TO 120 SECONDS
WHICH MINIMIZES CRITICAL MOVEMENT DELAY IS 108.2 SECONDS

THE V/C RATIO CAN'T BE .95 FOR THE GIVEN CONDITIONS
THE EXISTING TIMING IS OPTIMAL

CINCH PROGRAM VERSION DATE 4-29-1988
1985 HCM - CHAPTER 9: SIGNALIZED - OPERATIONAL ANALYSIS
Airport Rd/Rt 2A
1995 PM Peak nb
date:02-18-1992 time:10:24:00
LAST DATA SET NAMES LOADED OR SAVED
VOLUME=29pm95 GEOMETRICS=29pm95 SIGNAL=29pm95
LOCATED IN CBD:N
VOLUME & GEOMETRICS

	VOLUMES			# OF LANES			LANE WIDTH			CROSS
DIR	LT	TH	RT	LT	TH	RT	LT	TH	RT	WALK
EB	2	720	0	0	1	0	0.0	12.0	0.0	0
WB	0	1144	18	0	1	0	0.0	12.0	0.0	0
NB	0	0	0	0	0	0	0.0	0.0	0.0	0
SB	184	0	34	0	1	0	0.0	12.0	0.0	0

TRAFFIC & ROADWAY CONDITIONS

			ADJ PARK			PEDESTRIANS			ARR
DIR	GRADE	%HV	Y/N	MOVES	BUSES	PHF	CROSS	BUT	MIN TIME	TYPE
EB	0.0%	0.0%	N	0	0	.900	0	N	7.0	3
WB	0.0%	0.0%	N	0	0	.900	0	N	7.0	3
NB	0.0%	0.0%		0	0	.000	0		7.0	0
SB	0.0%	0.0%		0	0	.900	0	N	7.0	3

PHASINGS

	EASTBOUND				WESTBOUND				NORTHBOUND				SOUTHBOUND				GREEN	Y+R	PRE/ACT
	l	t	r	p	l	t	r	p	l	t	r	p	l	t	r	p			
1	*	*				*	*										82.5	2	A
2													*		*		20.1	2	A

CYCLE= 106.6

VOLUME ADJUSTMENT WORKSHEET
PART 1 (MOVEMENT ADJUSTMENTS)

DIR	LTV	THV	RTV	PHF	LTFR	THFR	RTFR
EB	2	720	0	.900	2	800	0
WB	0	1144	18	.900	0	1271	20
NB	0	0	0	.000	0	0	0
SB	184	0	34	.900	204	0	38

PART 2 (LANE GROUP ADJUSTMENTS)

DIR	LN GROUP	FLOW	N	LU	v	Plt	Prt
EB	LT-TH	802	1	1.00	802	0.00	0.00
WB	TH-RT	1291	1	1.00	1291	0.00	0.02
SB	LT-RT	242	1	1.00	242	0.84	0.16

PART 3 (OPPOSING VOLUME ADJUSTMENTS)

LEFT TURN	OPPOSING APPROACH									
BEING OPPOSED	VOLUMES			% OPPOSING LEFT TURN			# LANES			OPPOSING
	LT	TH	RT	LT	TH	RT	LT	TH	RT	VOLUME
EASTBOUND	0	1271	20	100	100	100	0	1	0	1291
SOUTHBOUND	0	0	0	0	0	0	0	0	0	0

SATURATION FLOW ADJUSTMENT WORKSHEET

DIR	LN GROUP	IDEAL	N	Fwid	Fhv	Fgr	Fpark	Fbus	Farea	Frt	Flt	s
EB	LT-TH	1800	1	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.982	1768
WB	TH-RT	1800	1	1.000	1.000	1.000	1.000	1.000	1.000	0.898	1.000	1616
SB	LT-RT	1800	1	1.000	1.000	1.000	1.000	1.000	1.000	0.879	0.786	1244

SUPPLEMENTAL WORKSHEET FOR LEFT-TURN ADJUSTMENT FACTOR FLT

INPUT VARIABLES

DIR	C	G	N	Va	Vm	Vlt	Plt	No	Vo	Plto
EB	107	82	1	802	800	2	0.00	1	1291	0.00

CALCULATIONS

DIR	Sop	Yo	Gu	Fs	Pl	Gq	Pt	Gf	El	Fm	Flt
EB	1800	0.717	21.313	0.068	0.003	61.175	0.997	58.570	16.531	0.982	0.982

CAPACITY ANALYSIS WORKSHEET

DIR	LN GROUP	v	s	v/s	g/C	c	v/c	CRITICAL
EB	LT-TH	802	1768	0.45	0.77	1368	0.59	
WB	TH-RT	1291	1616	0.80	0.77	1251	1.03	*
SB	LT-RT	242	1244	0.19	0.19	235	1.03	*

CYCLE=106.6 LOST= 4.0 SUM V/S CRIT= 0.99 TOTAL V/C= 1.03

LEVEL OF SERVICE WORKSHEET

DIR	LN GROUP	v/c	g/C	C	d1	c	d2	PF	Delay	LOS	Avg Q	95% Q
EB	LT-TH	0.59	0.77	106.6	3.79	1368	0.49	0.85	3.64	A	5.4	5
WB	TH-RT	1.03	0.77	106.6	10.30	1251	27.98	0.85	32.54	D	16.0	36
SB	LT-RT	1.03	0.19	106.6	33.11	235	55.25	1.00	88.36	F	8.9	19

DIR	Delay	LOS
EB	3.64	A
WB	32.54	D
SB	88.36	F

INTERSECTION DELAY = 28.40 INTERSECTION LOS=D

THE CYCLE LENGTH WITHIN THE BOUNDS OF 60 TO 120 SECONDS
WHICH MINIMIZES CRITICAL MOVEMENT DELAY IS 106.7 SECONDS

THE V/C RATIO CAN'T BE .95 FOR THE GIVEN CONDITIONS
for chosen cycle length 106.7
suggested timing phase 1 is 82.6 secs green, 2.0 secs yellow + red clear
suggested timing phase 2 is 20.1 secs green, 2.0 secs yellow + red clear

CINCH PROGRAM VERSION DATE 4-29-1988
1985 HCM - CHAPTER 9: SIGNALIZED - OPERATIONAL ANALYSIS
Airport Rd/Rt 2A
1995 PM Peak b
date:02-18-1992 time:10:27:09
LAST DATA SET NAMES LOADED OR SAVED
VOLUME=29pm95b GEOMETRICS=29pm95b SIGNAL=29pm95b
LOCATED IN CBD:N
VOLUME & GEOMETRICS

	VOLUMES			# OF LANES			LANE WIDTH			CROSS
DIR	LT	TH	RT	LT	TH	RT	LT	TH	RT	WALK
EB	2	720	0	0	1	0	0.0	12.0	0.0	0
WB	0	1144	22	0	1	0	0.0	12.0	0.0	0
NB	0	0	0	0	0	0	0.0	0.0	0.0	0
SB	224	0	42	0	1	0	0.0	12.0	0.0	0

TRAFFIC & ROADWAY CONDITIONS

			ADJ PARK			PEDESTRIANS				ARR
DIR	GRADE	%HV	Y/N	MOVES	BUSES	PHF	CROSS	BUT	MIN TIME	TYPE
EB	0.0%	0.0%	N	0	0	.900	0	N	7.0	3
WB	0.0%	0.0%	N	0	0	.900	0	N	7.0	3
NB	0.0%	0.0%		0	0	.000	0		7.0	0
SB	0.0%	0.0%		0	0	.900	0	N	7.0	3

PHASINGS

	EASTBOUND				WESTBOUND				NORTHBOUND				SOUTHBOUND				GREEN	Y+R	PRE/ACT
	l	t	r	p	l	t	r	p	l	t	r	p	l	t	r	p			
1	*	*			.	*	*										87.0	2	A
2													*		*		25.8	2	A

CYCLE= 116.8

VOLUME ADJUSTMENT WORKSHEET
PART 1 (MOVEMENT ADJUSTMENTS)

DIR	LTV	THV	RTV	PHF	LTFR	THFR	RTFR
EB	2	720	0	.900	2	800	0
WB	0	1144	22	.900	0	1271	24
NB	0	0	0	.000	0	0	0
SB	224	0	42	.900	249	0	47

PART 2 (LANE GROUP ADJUSTMENTS)

DIR	LN GROUP	FLOW	N	LU	v	Plt	Prt
EB	LT-TH	802	1	1.00	802	0.00	0.00
WB	TH-RT	1296	1	1.00	1296	0.00	0.02
SB	LT-RT	296	1	1.00	296	0.84	0.16

PART 3 (OPPOSING VOLUME ADJUSTMENTS)

LEFT TURN BEING OPPOSED	OPPOSING APPROACH VOLUMES			% OPPOSING LEFT TURN			# LANES			OPPOSING
	LT	TH	RT	LT	TH	RT	LT	TH	RT	VOLUME
EASTBOUND	0	1271	24	100	100	100	0	1	0	1296
SOUTHBOUND	0	0	0	0	0	0	0	0	0	0

SATURATION FLOW ADJUSTMENT WORKSHEET

DIR	LN GROUP	IDEAL	N	Fwid	Fhv	Fgr	Fpark	Fbus	Farea	Frt	Flt	s
EB	LT-TH	1800	1	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.972	1749
WB	TH-RT	1800	1	1.000	1.000	1.000	1.000	1.000	1.000	0.897	1.000	1615
SB	LT-RT	1800	1	1.000	1.000	1.000	1.000	1.000	1.000	0.879	0.786	1244

SUPPLEMENTAL WORKSHEET FOR LEFT-TURN ADJUSTMENT FACTOR FLT

INPUT VARIABLES

DIR	C	G	N	Va	Vm	Vlt	Plt	No	Vo	Plto
EB	117	87	1	802	800	2	0.00	1	1296	0.00

CALCULATIONS

DIR	Sop	Yo	Gu	Fs	Pl	Gq	Pt	Gf	El	Fm	Flt
EB	1800	0.720	10.520	0.065	0.003	76.495	0.997	72.476	17.234	0.972	0.972

CAPACITY ANALYSIS WORKSHEET

DIR	LN GROUP	v	s	v/s	g/C	c	v/c	CRITICAL
EB	LT-TH	802	1749	0.46	0.74	1303	0.62	
WB	TH-RT	1296	1615	0.80	0.74	1203	1.08	*
SB	LT-RT	296	1244	0.24	0.22	275	1.08	*

CYCLE=116.8 LOST= 4.0 SUM V/S CRIT= 1.04 TOTAL V/C= 1.08

LEVEL OF SERVICE WORKSHEET

DIR	LN GROUP	v/c	g/C	C	d1	c	d2	PF	Delay	LOS	Avg Q	95% Q
EB	LT-TH	0.62	0.74	116.8	5.33	1303	0.64	0.85	5.07	B	6.6	7
WB	TH-RT	1.08	0.74	116.8	14.58	1203	43.81	0.85	49.63	E	23.2	54
SB	LT-RT	1.08	0.22	116.8	35.35	275	67.85	1.00	103.20	F	12.2	26

DIR	Delay	LOS
EB	5.07	B
WB	49.63	E
SB	103.20	F

INTERSECTION DELAY = 41.31 INTERSECTION LOS=E

THE CYCLE LENGTH WITHIN THE BOUNDS OF 60 TO 120 SECONDS
WHICH MINIMIZES CRITICAL MOVEMENT DELAY IS 116.8 SECONDS

THE V/C RATIO CAN'T BE .95 FOR THE GIVEN CONDITIONS
THE EXISTING TIMING IS OPTIMAL

CINCH PROGRAM VERSION DATE 1-12-1987
1985 HCM - CHAPTER 10 : UNSIGNALIZED - 3 APPROACHES (PAGE 1 of 2)
DATE:08-14-1991 TIME:09:50:04
Hartwell/Wood am

LAST DATASETS LOADED OR SAVED
VOLUME=23am90 GEOMETRICS=23am90
KEY: A- -B
|
C

GENERAL CHARACTERISTICS
POPULATION GREATER THAN 250,000: YES
CONTROLS: FROM C: STOP
FROM C RT LANE: STOP
PREVAILING SPEED: 35 MPH
MAIN STREET # OF LANES: 4 LANES
MAIN STREET APPROACH A - EXCLUSIVE RIGHT TURN LANE: N

MINOR STREET LANES
APPROACH: C: Wood NB
SHARED LEFT AND RIGHT TURN LANE: NO
LARGE RIGHT TURN RADIUS OR SHALLOW RIGHT TURN ANGLE: NO
RIGHT TURN ACCELERATION LANE ON MAJOR: NO

SIGHT DISTANCE RESTRICTIONS (in seconds)

APPROACH	A: Hartwell EB	B: Hartwell WB	C: Wood NB
LEFTS	0.00	0.00	0.50
THRUS	0.00	0.00	0.00
RIGHTS	0.00	0.00	0.00

APPROACH	A: Hartwell EB			B: Hartwell WB			C: Wood NB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT
VOLUME	0	318	13	488	663	0	38	0	475
PHF	0.87			0.88			0.91		
ADJ VOLUME	0	366	15	555	753	0	42	0	522
PERCENT GRADE	-2.70			2.70			-3.70		
PASS CAR/HR	0			835			38	0	478

STEP 1 RIGHT TURNS FROM C:Wood NB

CONFLICTING FLOWS	190
CRITICAL GAPS	5.2
CAPACITY	957
ACTUAL CAPACITY	957

STEP 2 LEFT TURNS FROM B:Hartwell WB

CONFLICTING FLOWS	380
CRITICAL GAPS	5.1
CAPACITY	798
CAPACITY USED	105%
IMPEDANCE FACTOR	0.00
ACTUAL CAPACITY	798

1985 HCM - CHAPTER 10 : UNSIGNALIZED - 3 APPROACHES (PAGE 2 of 2)
DATE:08-14-1991 TIME:09:50:04
Hartwell/Wood am

STEP 3 LEFT TURNS FROM	C:Wood NB
CONFLICTING FLOWS	1681
CRITICAL GAPS	7.3
CAPACITY	63
ACTUAL CAPACITY	0

SUMMARY OF LEVEL OF SERVICE BY MOVEMENT

MOVEMENT	DEMAND	CAPACITY	RESERVE	LOS	AVG DEL(SEC)	AVG QUEUE
LT FROM B:	835	798	-36	F	INFINITE	INFINITE
LT FROM C:	38	0	-38	F	INFINITE	INFINITE
RT FROM C:	478	957	479	A	7.51	0.08

CINCH PROGRAM VERSION DATE 1-12-1987
1985 HCM - CHAPTER 10 : UNSIGNALIZED - 3 APPROACHES (PAGE 1 of 2)
DATE:08-21-1991 TIME:20:41:19
Hartwell/Wood AM 1995

LAST DATASETS LOADED OR SAVED
VOLUME=23am95 GEOMETRICS=23am95
KEY: A- -B
|
C

GENERAL CHARACTERISTICS
POPULATION GREATER THAN 250,000: YES
CONTROLS: FROM C: STOP
FROM C RT LANE: STOP
PREVAILING SPEED: 35 MPH
MAIN STREET # OF LANES: 4 LANES
MAIN STREET APPROACH A - EXCLUSIVE RIGHT TURN LANE: N

MINOR STREET LANES
APPROACH: C: Wood NB
SHARED LEFT AND RIGHT TURN LANE: NO
LARGE RIGHT TURN RADIUS OR SHALLOW RIGHT TURN ANGLE: NO
RIGHT TURN ACCELERATION LANE ON MAJOR: NO

SIGHT DISTANCE RESTRICTIONS (in seconds)

APPROACH	A: Hartwell EB	B: Hartwell WB	C: Wood NB
LEFTS	0.00	0.00	0.50
THRUS	0.00	0.00	0.00
RIGHTS	0.00	0.00	0.00

APPROACH	A: Hartwell EB			B: Hartwell WB			C: Wood NB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT
VOLUME	0	321	10	548	666	0	14	0	566
PHF	0.87			0.88			0.91		
ADJ VOLUME	0	369	11	623	757	0	15	0	622
PERCENT GRADE	-2.70			2.70			-3.70		
PASS CAR/HR	0			937			14	0	569

STEP 1 RIGHT TURNS FROM C:Wood NB

CONFLICTING FLOWS	190
CRITICAL GAPS	5.2
CAPACITY	957
ACTUAL CAPACITY	957

STEP 2 LEFT TURNS FROM B:Hartwell WB

CONFLICTING FLOWS	380
CRITICAL GAPS	5.1
CAPACITY	798
CAPACITY USED	117%
IMPEDANCE FACTOR	0.00
ACTUAL CAPACITY	798

DATE:08-21-1991 TIME:20:41:19
Hartwell/Wood AM 1995

STEP 3 LEFT TURNS FROM	C:Wood NB	
CONFLICTING FLOWS		1754
CRITICAL GAPS		7.3
CAPACITY		56
ACTUAL CAPACITY		0

SUMMARY OF LEVEL OF SERVICE BY MOVEMENT

MOVEMENT	DEMAND	CAPACITY	RESERVE	LOS	AVG DEL(SEC)	AVG QUEU
LT FROM B:	937	798	-139	F	INFINITE	INFINITE
LT FROM C:	14	0	-14	F	INFINITE	INFINITE
RT FROM C:	569	957	388	B	9.28	0.04

CINCH PROGRAM VERSION DATE 1-12-1987
1985 HCM - CHAPTER 10 : UNSIGNALIZED - 3 APPROACHES (PAGE 1 of 2)
DATE:08-21-1991 TIME:20:42:48
Hartwell/Wood AM 1995 b

LAST DATASETS LOADED OR SAVED
VOLUME=23am95b GEOMETRICS=23am95b
KEY: A- -B
|
C

GENERAL CHARACTERISTICS
POPULATION GREATER THAN 250,000: YES
CONTROLS: FROM C: STOP
FROM C RT LANE: STOP
PREVAILING SPEED: 35 MPH
MAIN STREET # OF LANES: 4 LANES
MAIN STREET APPROACH A - EXCLUSIVE RIGHT TURN LANE: N

MINOR STREET LANES
APPROACH: C: Wood NB
SHARED LEFT AND RIGHT TURN LANE: NO
LARGE RIGHT TURN RADIUS OR SHALLOW RIGHT TURN ANGLE: NO
RIGHT TURN ACCELERATION LANE ON MAJOR: NO

SIGHT DISTANCE RESTRICTIONS (in seconds)

APPROACH	A: Hartwell EB	B: Hartwell WB	C: Wood NB
LEFTS	0.00	0.00	0.50
THRUS	0.00	0.00	0.00
RIGHTS	0.00	0.00	0.00

APPROACH	A: Hartwell EB			B: Hartwell WB			C: Wood NB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT
VOLUME	0	323	10	585	711	0	14	0	568
PHF	0.87			0.88			0.91		
ADJ VOLUME	0	371	11	665	808	0	15	0	624
PERCENT GRADE	-2.70			2.70			-3.70		
PASS CAR/HR	0			1000			14	0	571

STEP 1 RIGHT TURNS FROM C:Wood NB

CONFLICTING FLOWS	191
CRITICAL GAPS	5.2
CAPACITY	956
ACTUAL CAPACITY	956

STEP 2 LEFT TURNS FROM B:Hartwell WB

CONFLICTING FLOWS	383
CRITICAL GAPS	5.1
CAPACITY	796
CAPACITY USED	126%
IMPEDANCE FACTOR	0.00
ACTUAL CAPACITY	796

DATE:08-21-1991 TIME:20:42:48
Hartwell/Wood AM 1995 b

STEP 3 LEFT TURNS FROM	C:Wood NB
CONFLICTING FLOWS	1850
CRITICAL GAPS	7.3
CAPACITY	49
ACTUAL CAPACITY	0

SUMMARY OF LEVEL OF SERVICE BY MOVEMENT

MOVEMENT	DEMAND	CAPACITY	RESERVE	LOS	AVG DEL(SEC)	AVG QUEUE
LT FROM B:	1000	796	-204	F	INFINITE	INFINITE
LT FROM C:	14	0	-14	F	INFINITE	INFINITE
RT FROM C:	571	956	385	B	9.36	0.04

CINCH PROGRAM VERSION DATE 1-12-1987
1985 HCM - CHAPTER 10 : UNSIGNALIZED - 3 APPROACHES (PAGE 1 of 2)
DATE:08-19-1991 TIME:09:12:01
Hartwell/Wood PM 90

LAST DATASETS LOADED OR SAVED
VOLUME=23pm90 GEOMETRICS=23(90)
KEY: A- -B
|
C

GENERAL CHARACTERISTICS
POPULATION GREATER THAN 250,000: YES
CONTROLS: FROM C: STOP
FROM C RT LANE: STOP
PREVAILING SPEED: 35 MPH
MAIN STREET # OF LANES: 4 LANES
MAIN STREET APPROACH A - EXCLUSIVE RIGHT TURN LANE: N

MINOR STREET LANES
APPROACH: C: Wood NB
SHARED LEFT AND RIGHT TURN LANE: NO
LARGE RIGHT TURN RADIUS OR SHALLOW RIGHT TURN ANGLE: NO
RIGHT TURN ACCELERATION LANE ON MAJOR: NO

SIGHT DISTANCE RESTRICTIONS (in seconds)

APPROACH	A: Hartwell EB	B: Hartwell WB	C: Wood NB
LEFTS	0.00	0.00	0.50
THRUS	0.00	0.00	0.00
RIGHTS	0.00	0.00	0.00

APPROACH	A: Hartwell EB			B: Hartwell WB			C: Wood NB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT
VOLUME	0	539	38	385	406	0	12	0	357
PHF	0.83			0.82			0.77		
ADJ VOLUME	0	649	46	470	495	0	16	0	464
PERCENT GRADE	-2.70			2.70			-3.70		
PASS CAR/HR	0			707			14	0	424

STEP 1 RIGHT TURNS FROM C:Wood NB

CONFLICTING FLOWS	348
CRITICAL GAPS	5.2
CAPACITY	805
ACTUAL CAPACITY	805

STEP 2 LEFT TURNS FROM B:Hartwell WB

CONFLICTING FLOWS	695
CRITICAL GAPS	5.1
CAPACITY	569
CAPACITY USED	124%
IMPEDANCE FACTOR	0.00
ACTUAL CAPACITY	569

DATE:08-19-1991 TIME:09:12:01
Hartwell/Wood PM 90

STEP 3 LEFT TURNS FROM	C:Wood NB
CONFLICTING FLOWS	1637
CRITICAL GAPS	7.3
CAPACITY	67
ACTUAL CAPACITY	0

SUMMARY OF LEVEL OF SERVICE BY MOVEMENT

MOVEMENT	DEMAND	CAPACITY	RESERVE	LOS	AVG DEL(SEC)	AVG QUEU
LT FROM B:	707	569	-138	F	INFINITE	INFINITE
LT FROM C:	14	0	-14	F	INFINITE	INFINITE
RT FROM C:	424	805	381	B	9.45	0.04

CINCH PROGRAM VERSION DATE 1-12-1987
1985 HCM - CHAPTER 10 : UNSIGNALIZED - 3 APPROACHES (PAGE 1 of 2)
DATE:08-19-1991 TIME:09:02:24
Hartwell/Wood PM nb 95

LAST DATASETS LOADED OR SAVED
VOLUME=23pm95 GEOMETRICS=23(90)
KEY: A- -B
|
C

GENERAL CHARACTERISTICS
POPULATION GREATER THAN 250,000: YES
CONTROLS: FROM C: STOP
FROM C RT LANE: STOP
PREVAILING SPEED: 35 MPH
MAIN STREET # OF LANES: 4 LANES
MAIN STREET APPROACH A - EXCLUSIVE RIGHT TURN LANE: N

MINOR STREET LANES
APPROACH: C: Wood NB
SHARED LEFT AND RIGHT TURN LANE: NO
LARGE RIGHT TURN RADIUS OR SHALLOW RIGHT TURN ANGLE: NO
RIGHT TURN ACCELERATION LANE ON MAJOR: NO

SIGHT DISTANCE RESTRICTIONS (in seconds)

APPROACH	A: Hartwell EB	B: Hartwell WB	C: Wood NB
LEFTS	0.00	0.00	0.50
THRUS	0.00	0.00	0.00
RIGHTS	0.00	0.00	0.00

APPROACH	A: Hartwell EB			B: Hartwell WB			C: Wood NB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT
VOLUME	0	539	14	388	411	0	12	0	357
PHF	0.83			0.82			0.77		
ADJ VOLUME	0	649	17	473	501	0	16	0	464
PERCENT GRADE	-2.70			2.70			-3.70		
PASS CAR/HR	0			712			14	0	424

STEP 1 RIGHT TURNS FROM C:Wood NB

CONFLICTING FLOWS	333
CRITICAL GAPS	5.2
CAPACITY	818
ACTUAL CAPACITY	818

STEP 2 LEFT TURNS FROM B:Hartwell WB

CONFLICTING FLOWS	666
CRITICAL GAPS	5.1
CAPACITY	587
CAPACITY USED	121%
IMPEDANCE FACTOR	0.00
ACTUAL CAPACITY	587

DATE:08-19-1991 TIME:09:02:24
Hartwell/Wood PM nb 95

STEP 3 LEFT TURNS FROM	C:Wood NB
CONFLICTING FLOWS	1632
CRITICAL GAPS	7.3
CAPACITY	68
ACTUAL CAPACITY	0

SUMMARY OF LEVEL OF SERVICE BY MOVEMENT

MOVEMENT	DEMAND	CAPACITY	RESERVE	LOS	AVG DEL(SEC)	AVG QUEU
LT FROM B:	712	587	-125	F	INFINITE	INFINITE
LT FROM C:	14	0	-14	F	INFINITE	INFINITE
RT FROM C:	424	818	394	B	9.14	0.04

CINCH PROGRAM VERSION DATE 1-12-1987
1985 HCM - CHAPTER 10 : UNSIGNALIZED - 3 APPROACHES (PAGE 1 of 2)
DATE:08-19-1991 TIME:09:05:38
Hartwell/Wood PM b 95

LAST DATASETS LOADED OR SAVED
VOLUME=23pm95b GEOMETRICS=23(90)
KEY: A- -B
|
C

GENERAL CHARACTERISTICS
POPULATION GREATER THAN 250,000: YES
CONTROLS: FROM C: STOP
FROM C RT LANE: STOP
PREVAILING SPEED: 35 MPH
MAIN STREET # OF LANES: 4 LANES
MAIN STREET APPROACH A - EXCLUSIVE RIGHT TURN LANE: N

MINOR STREET LANES
APPROACH: C: Wood NB
SHARED LEFT AND RIGHT TURN LANE: NO
LARGE RIGHT TURN RADIUS OR SHALLOW RIGHT TURN ANGLE: NO
RIGHT TURN ACCELERATION LANE ON MAJOR: NO

SIGHT DISTANCE RESTRICTIONS (in seconds)

APPROACH	A: Hartwell EB	B: Hartwell WB	C: Wood NB
LEFTS	0.00	0.00	0.50
THRUS	0.00	0.00	0.00
RIGHTS	0.00	0.00	0.00

APPROACH	A: Hartwell EB			B: Hartwell WB			C: Wood NB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT
VOLUME	0	568	14	391	416	0	12	0	380
PHF	0.83			0.82			0.77		
ADJ VOLUME	0	684	17	477	507	0	16	0	494
PERCENT GRADE	-2.70			2.70			-3.70		
PASS CAR/HR	0			718			14	0	452

STEP 1 RIGHT TURNS FROM C:Wood NB

CONFLICTING FLOWS	351
CRITICAL GAPS	5.2
CAPACITY	803
ACTUAL CAPACITY	803

STEP 2 LEFT TURNS FROM B:Hartwell WB

CONFLICTING FLOWS	701
CRITICAL GAPS	5.1
CAPACITY	565
CAPACITY USED	127%
IMPEDANCE FACTOR	0.00
ACTUAL CAPACITY	565

1985 HCM - CHAPTER 10 : UNSIGNALIZED - 3 APPROACHES (PAGE 2 of 2)
DATE:08-19-1991 TIME:09:05:38
Hartwell/Wood PM b 95

STEP 3 LEFT TURNS FROM	C:Wood NB
CONFLICTING FLOWS	1677
CRITICAL GAPS	7.3
CAPACITY	63
ACTUAL CAPACITY	0

SUMMARY OF LEVEL OF SERVICE BY MOVEMENT

MOVEMENT	DEMAND	CAPACITY	RESERVE	LOS	AVG DEL(SEC)	AVG QUEUE
LT FROM B:	718	565	-152	F	INFINITE	INFINITE
LT FROM C:	14	0	-14	F	INFINITE	INFINITE
RT FROM C:	452	803	351	B	10.26	0.04

CINCH PROGRAM VERSION DATE 1-12-1987
1985 HCM - CHAPTER 10 : UNSIGNALIZED - 3 APPROACHES (PAGE 1 of 2)
DATE:08-21-1991 TIME:20:47:24
Hartwell Ave/Maguire St.

LAST DATASETS LOADED OR SAVED
VOLUME=26am90 GEOMETRICS=26am90
KEY: A- -B
|
C

GENERAL CHARACTERISTICS
POPULATION GREATER THAN 250,000: YES
CONTROLS: FROM C: STOP
FROM C RT LANE: YIELD
PREVAILING SPEED: 45 MPH
MAIN STREET # OF LANES: 4 LANES
MAIN STREET APPROACH A - EXCLUSIVE RIGHT TURN LANE: N

MINOR STREET LANES
APPROACH: C: Maguire St.
SHARED LEFT AND RIGHT TURN LANE: NO
LARGE RIGHT TURN RADIUS OR SHALLOW RIGHT TURN ANGLE: NO
RIGHT TURN ACCELERATION LANE ON MAJOR: NO

SIGHT DISTANCE RESTRICTIONS (in seconds)

APPROACH	A: Hartwell Av	B: Hartwell Av	C: Maguire St.
LEFTS	0.00	0.00	0.00
THRUS	0.00	0.00	0.00
RIGHTS	0.00	0.00	0.00

APPROACH	A: Hartwell Av			B: Hartwell Av			C: Maguire St.		
	LT	TH	RT	LT	TH	RT	LT	TH	RT
VOLUME	0	1001	246	162	329	0	110	0	475
PHF	0.88			0.97			0.86		
ADJ VOLUME	0	1138	280	167	339	0	128	0	552
PERCENT GRADE	0.00			0.00			0.00		
PASS CAR/HR	0			184			141	0	608

STEP 1 RIGHT TURNS FROM C:Maguire St.

CONFLICTING FLOWS	709
CRITICAL GAPS	4.8
CAPACITY	623
ACTUAL CAPACITY	623

STEP 2 LEFT TURNS FROM B:Hartwell Ave N

CONFLICTING FLOWS	1417
CRITICAL GAPS	5.3
CAPACITY	237
CAPACITY USED	77%
IMPEDANCE FACTOR	0.28
ACTUAL CAPACITY	237

1985 HCM - CHAPTER 10 : UNSIGNALIZED - 3 APPROACHES (PAGE 2 of 2)
DATE:08-21-1991 TIME:20:47:24
Hartwell Ave/Maguire St.

STEP 3 LEFT TURNS FROM	C:Maguire St.
CONFLICTING FLOWS	1783
CRITICAL GAPS	7.4
CAPACITY	51
ACTUAL CAPACITY	14

SUMMARY OF LEVEL OF SERVICE BY MOVEMENT

MOVEMENT	DEMAND	CAPACITY	RESERVE	LOS	AVG DEL(SEC)	AVG QUEU
LT FROM B:	184	237	53	E	67.36	3.44
LT FROM C:	141	14	-126	F	INFINITE	INFINITE
RT FROM C:	608	623	16	E	230.01	8.99

CINCH PROGRAM VERSION DATE 1-12-1987
1985 HCM - CHAPTER 10 : UNSIGNALIZED - 3 APPROACHES (PAGE 1 of 2)
DATE:08-21-1991 TIME:20:49:42
Hartwell/Maguire am 1995

LAST DATASETS LOADED OR SAVED
VOLUME=26am95 GEOMETRICS=26am95
KEY: A- -B
|
C

GENERAL CHARACTERISTICS
POPULATION GREATER THAN 250,000: YES
CONTROLS: FROM C: STOP
FROM C RT LANE: YIELD
PREVAILING SPEED: 45 MPH
MAIN STREET # OF LANES: 4 LANES
MAIN STREET APPROACH A - EXCLUSIVE RIGHT TURN LANE: N

MINOR STREET LANES
APPROACH: C: Maguire St.
SHARED LEFT AND RIGHT TURN LANE: NO
LARGE RIGHT TURN RADIUS OR SHALLOW RIGHT TURN ANGLE: NO
RIGHT TURN ACCELERATION LANE ON MAJOR: NO

SIGHT DISTANCE RESTRICTIONS (in seconds)

APPROACH	A: Hartwell Av	B: Hartwell Av	C: Maguire St.
LEFTS	0.00	0.00	0.00
THRUS	0.00	0.00	0.00
RIGHTS	0.00	0.00	0.00

APPROACH	A: Hartwell Av			B: Hartwell Av			C: Maguire St.		
	LT	TH	RT	LT	TH	RT	LT	TH	RT
VOLUME	0	1031	248	172	294	0	104	0	505
PHF	0.88			0.97			0.86		
ADJ VOLUME	0	1172	282	177	303	0	121	0	587
PERCENT GRADE	0.00			0.00			0.00		
PASS CAR/HR	0			195			133	0	646

STEP 1 RIGHT TURNS FROM C:Maguire St.

CONFLICTING FLOWS	727
CRITICAL GAPS	4.8
CAPACITY	612
ACTUAL CAPACITY	612

STEP 2 LEFT TURNS FROM B:Hartwell Ave N

CONFLICTING FLOWS	1453
CRITICAL GAPS	5.3
CAPACITY	228
CAPACITY USED	86%
IMPEDANCE FACTOR	0.19
ACTUAL CAPACITY	228

1985 HCM - CHAPTER 10 : UNSIGNALIZED - 3 APPROACHES (PAGE 2 of 2)
DATE:08-21-1991 TIME:20:49:42
Hartwell/Maguire am 1995

STEP 3 LEFT TURNS FROM	C:Maguire St.
CONFLICTING FLOWS	1793
CRITICAL GAPS	7.4
CAPACITY	50
ACTUAL CAPACITY	10

SUMMARY OF LEVEL OF SERVICE BY MOVEMENT

MOVEMENT	DEMAND	CAPACITY	RESERVE	LOS	AVG DEL(SEC)	AVG QUEU
LT FROM B:	195	228	33	E	110.26	5.97
LT FROM C:	133	10	-124	F	INFINITE	INFINITE
RT FROM C:	646	612	-34	F	INFINITE	INFINITE

CINCH PROGRAM VERSION DATE 1-12-1987
1985 HCM - CHAPTER 10 : UNSIGNALIZED - 3 APPROACHES (PAGE 1 of 2)
DATE:08-21-1991 TIME:20:56:26
Hartwell/Maguire am 1995 b

LAST DATASETS LOADED OR SAVED
VOLUME=26am95b GEOMETRICS=26am95b
KEY: A- -B
|
C
GENERAL CHARACTERISTICS
POPULATION GREATER THAN 250,000: YES
CONTROLS: FROM C: STOP
FROM C RT LANE: YIELD
PREVAILING SPEED: 45 MPH
MAIN STREET # OF LANES: 4 LANES
MAIN STREET APPROACH A - EXCLUSIVE RIGHT TURN LANE: N

MINOR STREET LANES
APPROACH: C: Maguire St.
SHARED LEFT AND RIGHT TURN LANE: NO
LARGE RIGHT TURN RADIUS OR SHALLOW RIGHT TURN ANGLE: NO
RIGHT TURN ACCELERATION LANE ON MAJOR: NO

SIGHT DISTANCE RESTRICTIONS (in seconds)

APPROACH	A: Hartwell Av	B: Hartwell Av	C: Maguire St.
LEFTS	0.00	0.00	0.00
THRUS	0.00	0.00	0.00
RIGHTS	0.00	0.00	0.00

APPROACH	A: Hartwell Av			B: Hartwell Av			C: Maguire St.		
	LT	TH	RT	LT	TH	RT	LT	TH	RT
VOLUME	0	1098	248	174	298	0	104	0	520
PHF	0.88			0.97			0.86		
ADJ VOLUME	0	1248	282	179	307	0	121	0	605
PERCENT GRADE	0.00			0.00			0.00		
PASS CAR/HR	0			197			133	0	665

STEP 1 RIGHT TURNS FROM C:Maguire St.

CONFLICTING FLOWS	765
CRITICAL GAPS	4.8
CAPACITY	589
ACTUAL CAPACITY	589

STEP 2 LEFT TURNS FROM B:Hartwell Ave N

CONFLICTING FLOWS	1530
CRITICAL GAPS	5.3
CAPACITY	209
CAPACITY USED	94%
IMPEDANCE FACTOR	0.09
ACTUAL CAPACITY	209

1985 HCM - CHAPTER 10 : UNSIGNALIZED - 3 APPROACHES (PAGE 2 of 2)
DATE:08-21-1991 TIME:20:56:26
Hartwell/Maguire am 1995 b

STEP 3 LEFT TURNS FROM C:Maguire St.

CONFLICTING FLOWS	1875
CRITICAL GAPS	7.4
CAPACITY	44
ACTUAL CAPACITY	4

SUMMARY OF LEVEL OF SERVICE BY MOVEMENT

MOVEMENT	DEMAND	CAPACITY	RESERVE	LOS	AVG DEL(SEC)	AVG QUEU
LT FROM B:	197	209	12	E	305.15	16.73
LT FROM C:	133	4	-129	F	INFINITE	INFINITE
RT FROM C:	665	589	-76	F	INFINITE	INFINITE

CINCH PROGRAM VERSION DATE 4-29-1988
1985 HCM - CHAPTER 9: SIGNALIZED - OPERATIONAL ANALYSIS
Hartwell Ave/Maguire Rd
police officer rights adjusted
date:02-03-1992 time:12:47:25
LAST DATA SET NAMES LOADED OR SAVED
VOLUME=26pm90a GEOMETRICS=26pm90 SIGNAL=26pm90o
LOCATED IN CBD:n
VOLUME & GEOMETRICS

	VOLUMES			# OF LANES			LANE WIDTH			CROSS
DIR	LT	TH	RT	LT	TH	RT	LT	TH	RT	WALK
EB	509	766	0	1	1	0	12.0	12.0	0.0	0
WB	0	381	210	0	2	0	0.0	12.0	0.0	0
NB	0	0	0	0	0	0	0.0	0.0	0.0	0
SB	215	0	94	0	1	0	0.0	12.0	0.0	0

TRAFFIC & ROADWAY CONDITIONS

			ADJ PARK			PEDESTRIANS			ARR
DIR	GRADE	%HV	Y/N	MOVES	BUSES	PHF	CROSS	BUT MIN TIME	TYPE
EB	0.0%	0.0%	N	0	0	.880	0	7.0	3
WB	0.0%	0.0%	N	0	0	.920	0	7.0	3
NB	0.0%	0.0%		0	0	.000	0	7.0	0
SB	0.0%	0.0%	N	0	0	.890	0	7.0	3

PHASINGS

	EASTBOUND				WESTBOUND				NORTHBOUND				SOUTHBOUND				GREEN	Y+R	PRE/ACT
	l	t	r	p	l	t	r	p	l	t	r	p	l	t	r	p			
1	*	*															26.2	3	A
2		*				*	*										15.3	3	A
3													*		*		21.5	3	A

CYCLE= 72.0

VOLUME ADJUSTMENT WORKSHEET
PART 1 (MOVEMENT ADJUSTMENTS)

DIR	LTV	THV	RTV	PHF	LTFR	THFR	RTFR
EB	509	766	0	.880	578	870	0
WB	0	381	210	.920	0	414	228
NB	0	0	0	.000	0	0	0
SB	215	0	94	.890	242	0	106

PART 2 (LANE GROUP ADJUSTMENTS)

DIR	LN GROUP	FLOW	N	LU	v	Plt	Prt
EB	LT	578	1	1.00	578	1.00	0.00
EB	TH	870	1	1.00	870	0.00	0.00
WB	TH-RT	642	2	1.05	675	0.00	0.36
SB	LT-RT	347	1	1.00	347	0.70	0.30

PART 3 (OPPOSING VOLUME ADJUSTMENTS)

LEFT TURN	OPPOSING APPROACH									
BEING OPPOSED	VOLUMES			% OPPOSING LEFT TURN			# LANES			OPPOSING
	LT	TH	RT	LT	TH	RT	LT	TH	RT	VOLUME
EASTBOUND	0	414	228	0	0	0	0	2	0	0
SOUTHBOUND	0	0	0	0	0	0	0	0	0	0

SATURATION FLOW ADJUSTMENT WORKSHEET

DIR	LN GROUP	IDEAL	N	Fwid	Fhv	Fgr	Fpark	Fbus	Farea	Frt	Flt	s
EB	LT	1800	1	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.950	1710
EB	TH	1800	1	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1800
WB	TH-RT	1800	2	1.000	1.000	1.000	1.000	1.000	1.000	0.947	1.000	3408

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SB  LT-RT     1800  1 1.000 1.000 1.000 1.000 1.000 1.000 0.859 0.806 1246

CAPACITY ANALYSIS WORKSHEET
DIR LN GROUP    v    s  v/s  g/C    c  v/c  CRITICAL
EB  LT        578 1710 0.34 0.36  621 0.93     *
EB  TH        870 1800 0.48 0.62 1111 0.78
WB  TH-RT     675 3408 0.20 0.21  724 0.93     *
SB  LT-RT     347 1246 0.28 0.30  373 0.93     *

CYCLE= 72.0  LOST= 9.0  SUM V/S CRIT= 0.81 TOTAL V/C= 0.93

LEVEL OF SERVICE WORKSHEET
DIR LN GROUP  v/c  g/C   C     d1    c      d2   PF   Delay LOS Avg Q  95% Q
EB  LT       0.93 0.36  72.0  16.76  621   15.09 1.00   31.86  D   8.8   16
EB  TH       0.78 0.62  72.0   7.75 1111    2.61 0.85    8.81  B   6.7    7
WB  TH-RT    0.93 0.21  72.0  21.15  724   13.53 0.85   29.48  D  10.3   17
SB  LT-RT    0.93 0.30  72.0  18.63  373   21.38 1.00   40.01  E   6.3   13

DIR Delay LOS
EB  18.01  C
WB  29.48  D
SB  40.01  E
INTERSECTION DELAY = 24.23 INTERSECTION LOS=C

THE CYCLE LENGTH WITHIN THE BOUNDS OF  60  TO  120 SECONDS
WHICH MINIMIZES CRITICAL MOVEMENT DELAY IS  72.0 SECONDS

FOR A V/C RATIO OF .95 THE CYCLE SHOULD BE  63.2 SECONDS
THE EXISTING TIMING IS OPTIMAL
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CINCH PROGRAM VERSION DATE 4-29-1988
1985 HCM - CHAPTER 9: SIGNALIZED - OPERATIONAL ANALYSIS
Hartwell/Maguire PM 95 No Build
police officer rights adjusted
date:02-03-1992 time:12:58:22
LAST DATA SET NAMES LOADED OR SAVED
VOLUME=26pm95na GEOMETRICS=26pm90 SIGNAL=26pm95no
LOCATED IN CBD:n
VOLUME & GEOMETRICS

	VOLUMES			# OF LANES			LANE WIDTH			CROSS
DIR	LT	TH	RT	LT	TH	RT	LT	TH	RT	WALK
EB	529	750	0	1	1	0	12.0	12.0	0.0	0
WB	0	401	140	0	2	0	0.0	12.0	0.0	0
NB	0	0	0	0	0	0	0.0	0.0	0.0	0
SB	204	0	144	0	1	0	0.0	12.0	0.0	0

TRAFFIC & ROADWAY CONDITIONS

			ADJ PARK			PEDESTRIANS			ARR
DIR	GRADE	%HV	Y/N	MOVES	BUSES	PHF	CROSS	BUT MIN TIME	TYPE
EB	0.0%	0.0%	N	0	0	.880	0	7.0	3
WB	0.0%	0.0%	N	0	0	.920	0	7.0	3
NB	0.0%	0.0%		0	0	.000	0	7.0	0
SB	0.0%	0.0%	N	0	0	.890	0	7.0	3

PHASINGS

	EASTBOUND				WESTBOUND				NORTHBOUND				SOUTHBOUND				GREEN	Y+R	PRE/ACT
	l	t	r	p	l	t	r	p	l	t	r	p	l	t	r	p			
1	*	*															29.2	3	A
2		*				*	*										14.8	3	A
3														*		*	26.0	3	A

CYCLE= 79.0

VOLUME ADJUSTMENT WORKSHEET
PART 1 (MOVEMENT ADJUSTMENTS)

DIR	LTV	THV	RTV	PHF	LTFR	THFR	RTFR
EB	529	750	0	.880	601	852	0
WB	0	401	140	.920	0	436	152
NB	0	0	0	.000	0	0	0
SB	204	0	144	.890	229	0	162

PART 2 (LANE GROUP ADJUSTMENTS)

DIR	LN GROUP	FLOW	N	LU	v	Plt	Prt
EB	LT	601	1	1.00	601	1.00	0.00
EB	TH	852	1	1.00	852	0.00	0.00
WB	TH-RT	588	2	1.05	617	0.00	0.26
SB	LT-RT	391	1	1.00	391	0.59	0.41

PART 3 (OPPOSING VOLUME ADJUSTMENTS)

LEFT TURN	OPPOSING APPROACH									
BEING OPPOSED	VOLUMES			% OPPOSING LEFT TURN			# LANES			OPPOSING
	LT	TH	RT	LT	TH	RT	LT	TH	RT	VOLUME
EASTBOUND	0	436	152	0	0	0	0	2	0	0
SOUTHBOUND	0	0	0	0	0	0	0	0	0	0

SATURATION FLOW ADJUSTMENT WORKSHEET

DIR	LN GROUP	IDEAL	N	Fwid	Fhv	Fgr	Fpark	Fbus	Farea	Frt	Flt	s
EB	LT	1800	1	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.950	1710
EB	TH	1800	1	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1800
WB	TH-RT	1800	2	1.000	1.000	1.000	1.000	1.000	1.000	0.961	1.000	3460

SB LT-RT 1800 1 1.000 1.000 1.000 1.000 1.000 1.000 0.844 0.821 1247

CAPACITY ANALYSIS WORKSHEET

DIR	LN GROUP	v	s	v/s	g/C	c	v/c	CRITICAL
EB	LT	601	1710	0.35	0.37	631	0.95	*
EB	TH	852	1800	0.47	0.59	1070	0.80	
WB	TH-RT	617	3460	0.18	0.19	649	0.95	*
SB	LT-RT	391	1247	0.31	0.33	411	0.95	*

CYCLE= 79.0 LOST= 9.0 SUM V/S CRIT= 0.84 TOTAL V/C= 0.95

LEVEL OF SERVICE WORKSHEET

DIR	LN GROUP	v/c	g/C	C	d1	c	d2	PF	Delay	LOS	Avg Q	95% Q
EB	LT	0.95	0.37	79.0	18.42	631	17.95	1.00	36.36	D	10.2	19
EB	TH	0.80	0.59	79.0	9.36	1070	3.00	0.85	10.51	B	7.6	8
WB	TH-RT	0.95	0.19	79.0	24.13	649	17.64	0.85	35.50	D	11.0	18
SB	LT-RT	0.95	0.33	79.0	19.67	411	23.58	1.00	43.25	E	7.6	15

DIR	Delay	LOS
EB	21.20	C
WB	35.50	D
SB	43.25	E

INTERSECTION DELAY = 28.29 INTERSECTION LOS=D

THE CYCLE LENGTH WITHIN THE BOUNDS OF 60 TO 120 SECONDS
WHICH MINIMIZES CRITICAL MOVEMENT DELAY IS 79.0 SECONDS

FOR A V/C RATIO OF .95 THE CYCLE SHOULD BE 80.3.SECONDS
THE EXISTING TIMING IS OPTIMAL

CINCH PROGRAM VERSION DATE 4-29-1988
1985 HCM - CHAPTER 9: SIGNALIZED - OPERATIONAL ANALYSIS
Hartwell/Maguire PM 95 Build
police officer rights adjusted
date:02-03-1992 time:13:11:32
LAST DATA SET NAMES LOADED OR SAVED
VOLUME=26pm95ba GEOMETRICS=26pm90 SIGNAL=26pm95bo
LOCATED IN CBD:n
VOLUME & GEOMETRICS

	VOLUMES			# OF LANES			LANE WIDTH			CROSS
DIR	LT	TH	RT	LT	TH	RT	LT	TH	RT	WALK
EB	538	793	0	1	1	0	12.0	12.0	0.0	0
WB	0	406	140	0	2	0	0.0	12.0	0.0	0
NB	0	0	0	0	0	0	0.0	0.0	0.0	0
SB	204	0	149	0	1	0	0.0	12.0	0.0	0

TRAFFIC & ROADWAY CONDITIONS

			ADJ PARK			PEDESTRIANS			ARR
DIR	GRADE	%HV	Y/N	MOVES	BUSES	PHF	CROSS	BUT MIN TIME	TYPE
EB	0.0%	0.0%	N	0	0	.880	0	7.0	3
WB	0.0%	0.0%	N	0	0	.920	0	7.0	3
NB	0.0%	0.0%		0	0	.000	0	7.0	0
SB	0.0%	0.0%	N	0	0	.890	0	7.0	3

PHASINGS

	EASTBOUND				WESTBOUND				NORTHBOUND				SOUTHBOUND				GREEN	Y+R	PRE/ACT
	l	t	r	p	l	t	r	p	l	t	r	p	l	t	r	p			
1	*	*															30.9	3	A
2		*				*	*										15.6	3	A
3														*		*	27.5	3	A

CYCLE= 83.0

VOLUME ADJUSTMENT WORKSHEET
PART 1 (MOVEMENT ADJUSTMENTS)

DIR	LTV	THV	RTV	PHF	LTFR	THFR	RTFR
EB	538	793	0	.880	611	901	0
WB	0	406	140	.920	0	441	152
NB	0	0	0	.000	0	0	0
SB	204	0	149	.890	229	0	167

PART 2 (LANE GROUP ADJUSTMENTS)

DIR	LN GROUP	FLOW	N	LU	v	Plt	Prt
EB	LT	611	1	1.00	611	1.00	0.00
EB	TH	901	1	1.00	901	0.00	0.00
WB	TH-RT	593	2	1.05	623	0.00	0.26
SB	LT-RT	397	1	1.00	397	0.58	0.42

PART 3 (OPPOSING VOLUME ADJUSTMENTS)

LEFT TURN	OPPOSING APPROACH									
BEING OPPOSED	VOLUMES			% OPPOSING LEFT TURN			# LANES			OPPOSING
	LT	TH	RT	LT	TH	RT	LT	TH	RT	VOLUME
EASTBOUND	0	441	152	0	0	0	0	2	0	0
SOUTHBOUND	0	0	0	0	0	0	0	0	0	0

SATURATION FLOW ADJUSTMENT WORKSHEET

DIR	LN GROUP	IDEAL	N	Fwid	Fhv	Fgr	Fpark	Fbus	Farea	Frt	Flt	s
EB	LT	1800	1	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.950	1710
EB	TH	1800	1	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1800
WB	TH-RT	1800	2	1.000	1.000	1.000	1.000	1.000	1.000	0.962	1.000	3462

```
SB  LT-RT     1800  1 1.000 1.000 1.000 1.000 1.000 1.000 0.843 0.822 1247

CAPACITY ANALYSIS WORKSHEET
DIR LN GROUP    v    s  v/s  g/C    c  v/c  CRITICAL
EB  LT        611 1710 0.36 0.37  637 0.96     *
EB  TH        901 1800 0.50 0.60 1073 0.84
WB  TH-RT     623 3462 0.18 0.19  649 0.96     *
SB  LT-RT     397 1247 0.32 0.33  413 0.96     *

CYCLE= 83.0  LOST= 9.0  SUM V/S CRIT= 0.86 TOTAL V/C= 0.96

LEVEL OF SERVICE WORKSHEET
DIR LN GROUP  v/c  g/C   C     d1    c      d2    PF   Delay LOS Avg Q  95% Q
EB  LT       0.96 0.37  83.0  19.33  637   19.12 1.00   38.44  D  10.9   21
EB  TH       0.84 0.60  83.0  10.29 1073    4.28 0.85   12.39  B   8.4   10
WB  TH-RT    0.96 0.19  83.0  25.39  649   18.89 0.85   37.63  D  11.8   20
SB  LT-RT    0.96 0.33  83.0  20.67  413   24.93 1.00   45.61  E   8.1   16

DIR Delay LOS
EB  22.92  C
WB  37.63  D
SB  45.61  E
INTERSECTION DELAY = 30.09 INTERSECTION LOS=D

THE CYCLE LENGTH WITHIN THE BOUNDS OF  60  TO  120 SECONDS
WHICH MINIMIZES CRITICAL MOVEMENT DELAY IS  83.0 SECONDS

FOR A V/C RATIO OF .95 THE CYCLE SHOULD BE  90.5 SECONDS
THE EXISTING TIMING IS OPTIMAL
```

CINCH PROGRAM VERSION DATE 1-12-1987
1985 HCM - CHAPTER 10 : UNSIGNALIZED - 3 APPROACHES (PAGE 1 of 2)
DATE:08-21-1991 TIME:21:06:34
Bedford/Eldred am 90

LAST DATASETS LOADED OR SAVED
VOLUME=27am90 GEOMETRICS=27am90
KEY: A- -B
|
C
GENERAL CHARACTERISTICS
POPULATION GREATER THAN 250,000: NO
CONTROLS: FROM C: STOP
PREVAILING SPEED: 35 MPH
MAIN STREET # OF LANES: 4 LANES
MAIN STREET APPROACH A - EXCLUSIVE RIGHT TURN LANE: N

MINOR STREET LANES
APPROACH: C: ELDRED ST
SHARED LEFT AND RIGHT TURN LANE: YES
LARGE RIGHT TURN RADIUS OR SHALLOW RIGHT TURN ANGLE: NO
RIGHT TURN ACCELERATION LANE ON MAJOR: NO

SIGHT DISTANCE RESTRICTIONS (in seconds)

APPROACH	A: BEDFORD ST	B: BEDFORD ST	C: ELDRED ST
LEFTS	0.00	0.00	0.00
THRUS	0.00	0.00	0.00
RIGHTS	0.00	0.00	0.00

APPROACH	A: BEDFORD ST			B: BEDFORD ST			C: ELDRED ST		
	LT	TH	RT	LT	TH	RT	LT	TH	RT
VOLUME	0	2165	47	20	1432	0	2	0	91
PHF	0.87			0.91			0.77		
ADJ VOLUME	0	2489	54	22	1574	0	3	0	118
PERCENT GRADE	-1.00			0.00			-2.00		
PERCENT CYCLES	0.00			0.00			0.00		
PASSENGER CARS	99.00			99.00			94.00		
PERCENT LT TRU	1.00			1.00			3.00		
PERCENT HV TRU	0.00			0.00			3.00		
PASS CAR/HR	0			22			2	0	110

STEP 1 RIGHT TURNS FROM C:ELDRED ST

CONFLICTING FLOWS	1271
CRITICAL GAPS	5.2
CAPACITY	292
ACTUAL CAPACITY	292

STEP 2 LEFT TURNS FROM B:BEDFORD ST

CONFLICTING FLOWS	2543
CRITICAL GAPS	5.1
CAPACITY	78
CAPACITY USED	28%
IMPEDANCE FACTOR	0.79
ACTUAL CAPACITY	78

1985 HCM - CHAPTER 10 : UNSIGNALIZED - 3 APPROACHES (PAGE 2 of 2)
DATE:08-21-1991 TIME:21:06:34
Bedford/Eldred am 90

STEP 3 LEFT TURNS FROM C:ELDRED ST

CONFLICTING FLOWS	4111
CRITICAL GAPS	6.8
CAPACITY	2
ACTUAL CAPACITY	2

SUMMARY OF LEVEL OF SERVICE BY MOVEMENT

MOVEMENT	DEMAND	CAPACITY	RESERVE	LOS	AVG DEL(SEC)	AVG QUEUE
LT FROM B:	22	78	56	E	64.47	0.40
ALL MOVES FROM C:	113	69	-43	F	INFINITE	INFINITE

CINCH PROGRAM VERSION DATE 1-12-1987
1985 HCM - CHAPTER 10 : UNSIGNALIZED - 3 APPROACHES (PAGE 1 of 2)
DATE:08-21-1991 TIME:21:17:26
Bedford/Eldred am 95

LAST DATASETS LOADED OR SAVED
VOLUME=27am95 GEOMETRICS=27am95
KEY: A- -B
|
C
GENERAL CHARACTERISTICS
POPULATION GREATER THAN 250,000: NO
CONTROLS: FROM C: STOP
PREVAILING SPEED: 35 MPH
MAIN STREET # OF LANES: 4 LANES
MAIN STREET APPROACH A - EXCLUSIVE RIGHT TURN LANE: N

MINOR STREET LANES
APPROACH: C: ELDRED ST
SHARED LEFT AND RIGHT TURN LANE: YES
LARGE RIGHT TURN RADIUS OR SHALLOW RIGHT TURN ANGLE: NO
RIGHT TURN ACCELERATION LANE ON MAJOR: NO

SIGHT DISTANCE RESTRICTIONS (in seconds)

APPROACH	A: BEDFORD ST	B: BEDFORD ST	C: ELDRED ST
LEFTS	0.00	0.00	0.00
THRUS	0.00	0.00	0.00
RIGHTS	0.00	0.00	0.00

APPROACH	A: BEDFORD ST			B: BEDFORD ST			C: ELDRED ST		
	LT	TH	RT	LT	TH	RT	LT	TH	RT
VOLUME	0	2234	47	20	1415	0	2	0	91
PHF	0.87			0.91			0.77		
ADJ VOLUME	0	2568	54	22	1555	0	3	0	118
PERCENT GRADE	-1.00			0.00			-2.00		
PERCENT CYCLES	0.00			0.00			0.00		
PASSENGER CARS	99.00			99.00			94.00		
PERCENT LT TRU	1.00			1.00			3.00		
PERCENT HV TRU	0.00			0.00			3.00		
PASS CAR/HR	0			22			2	0	110

STEP 1 RIGHT TURNS FROM C:ELDRED ST

CONFLICTING FLOWS	1311
CRITICAL GAPS	5.2
CAPACITY	280
ACTUAL CAPACITY	280

STEP 2 LEFT TURNS FROM B:BEDFORD ST

CONFLICTING FLOWS	2622
CRITICAL GAPS	5.1
CAPACITY	72
CAPACITY USED	31%
IMPEDANCE FACTOR	0.76
ACTUAL CAPACITY	72

DATE:08-21-1991 TIME:21:17:26
Bedford/Eldred am 95

STEP 3 LEFT TURNS FROM C:ELDRED ST

CONFLICTING FLOWS	4172
CRITICAL GAPS	6.8
CAPACITY	2
ACTUAL CAPACITY	2

SUMMARY OF LEVEL OF SERVICE BY MOVEMENT

MOVEMENT	DEMAND	CAPACITY	RESERVE	LOS	AVG DEL(SEC)	AVG QUEU
LT FROM B:	22	72	49	E	72.77	0.45
ALL MOVES FROM C:	113	63	-50	F	INFINITE	INFINITE

CINCH PROGRAM VERSION DATE 1-12-1987
1985 HCM - CHAPTER 10 : UNSIGNALIZED - 3 APPROACHES (PAGE 1 of 2)
DATE:08-21-1991 TIME:21:14:34
Bedford/Eldred am 95b

LAST DATASETS LOADED OR SAVED
VOLUME=27am95b GEOMETRICS=27am95b
KEY: A- -B
|
C

GENERAL CHARACTERISTICS
POPULATION GREATER THAN 250,000: NO
CONTROLS: FROM C: STOP
PREVAILING SPEED: 35 MPH
MAIN STREET # OF LANES: 4 LANES
MAIN STREET APPROACH A - EXCLUSIVE RIGHT TURN LANE: N

MINOR STREET LANES
APPROACH: C: ELDRED ST
SHARED LEFT AND RIGHT TURN LANE: YES
LARGE RIGHT TURN RADIUS OR SHALLOW RIGHT TURN ANGLE: NO
RIGHT TURN ACCELERATION LANE ON MAJOR: NO

SIGHT DISTANCE RESTRICTIONS (in seconds)

APPROACH	A: BEDFORD ST	B: BEDFORD ST	C: ELDRED ST
LEFTS	0.00	0.00	0.00
THRUS	0.00	0.00	0.00
RIGHTS	0.00	0.00	0.00

APPROACH	A: BEDFORD ST			B: BEDFORD ST			C: ELDRED ST		
	LT	TH	RT	LT	TH	RT	LT	TH	RT
VOLUME	0	2293	47	20	1415	0	2	0	91
PHF	0.87			0.91			0.77		
ADJ VOLUME	0	2636	54	22	1555	0	3	0	118
PERCENT GRADE	-1.00			0.00			-2.00		
PERCENT CYCLES	0.00			0.00			0.00		
PASSENGER CARS	99.00			99.00			94.00		
PERCENT LT TRU	1.00			1.00			3.00		
PERCENT HV TRU	0.00			0.00			3.00		
PASS CAR/HR	0			22			2	0	110

STEP 1 RIGHT TURNS FROM C:ELDRED ST

CONFLICTING FLOWS	1345
CRITICAL GAPS	5.2
CAPACITY	270
ACTUAL CAPACITY	270

STEP 2 LEFT TURNS FROM B:BEDFORD ST

CONFLICTING FLOWS	2690
CRITICAL GAPS	5.1
CAPACITY	67
CAPACITY USED	33%
IMPEDANCE FACTOR	0.74
ACTUAL CAPACITY	67

1985 HCM - CHAPTER 10 : UNSIGNALIZED - 3 APPROACHES (PAGE 2 of 2)
DATE:08-21-1991 TIME:21:14:34
Bedford/Eldred am 95b

STEP 3 LEFT TURNS FROM C:ELDRED ST

CONFLICTING FLOWS	4240
CRITICAL GAPS	6.8
CAPACITY	2
ACTUAL CAPACITY	2

SUMMARY OF LEVEL OF SERVICE BY MOVEMENT

MOVEMENT	DEMAND	CAPACITY	RESERVE	LOS	AVG DEL(SEC)	AVG QUEU
LT FROM B:	22	67	44	E	81.02	0.50
ALL MOVES FROM C:	113	56	-56	F	INFINITE	INFINITE

CINCH PROGRAM VERSION DATE 1-12-1987
1985 HCM - CHAPTER 10 : UNSIGNALIZED - 3 APPROACHES (PAGE 1 of 2)
DATE:08-19-1991 TIME:22:52:22
Bedford/Eldred pm90

LAST DATASETS LOADED OR SAVED
VOLUME=27pm90 GEOMETRICS=27pm90
KEY: A- -B
|
C

GENERAL CHARACTERISTICS
POPULATION GREATER THAN 250,000: NO
CONTROLS: FROM C: STOP
PREVAILING SPEED: 35 MPH
MAIN STREET # OF LANES: 4 LANES
MAIN STREET APPROACH A - EXCLUSIVE RIGHT TURN LANE: N

MINOR STREET LANES
APPROACH: C: ELDRED ST
SHARED LEFT AND RIGHT TURN LANE: YES
LARGE RIGHT TURN RADIUS OR SHALLOW RIGHT TURN ANGLE: NO
RIGHT TURN ACCELERATION LANE ON MAJOR: NO

SIGHT DISTANCE RESTRICTIONS (in seconds)

APPROACH	A: BEDFORD ST	B: BEDFORD ST	C: ELDRED ST
LEFTS	0.00	0.00	0.00
THRUS	0.00	0.00	0.00
RIGHTS	0.00	0.00	0.00

APPROACH	A: BEDFORD ST			B: BEDFORD ST			C: ELDRED ST		
	LT	TH	RT	LT	TH	RT	LT	TH	RT
VOLUME	0	1565	80	48	2151	0	31	0	37
PHF	0.87			0.91			0.77		
ADJ VOLUME	0	1799	92	53	2364	0	40	0	48
PERCENT GRADE	-1.00			0.00			-2.00		
PERCENT CYCLES	0.00			0.00			0.00		
PASSENGER CARS	99.00			99.00			94.00		
PERCENT LT TRU	1.00			1.00			3.00		
PERCENT HV TRU	0.00			0.00			3.00		
PASS CAR/HR	0			53			38	0	45

STEP 1 RIGHT TURNS FROM C:ELDRED ST

CONFLICTING FLOWS	945
CRITICAL GAPS	4.7
CAPACITY	511
ACTUAL CAPACITY	511

STEP 2 LEFT TURNS FROM B:BEDFORD ST

CONFLICTING FLOWS	1891
CRITICAL GAPS	5.1
CAPACITY	157
CAPACITY USED	34%
IMPEDANCE FACTOR	0.74
ACTUAL CAPACITY	157

1985 HCM - CHAPTER 10 : UNSIGNALIZED - 3 APPROACHES (PAGE 2 of 2)
DATE:08-19-1991 TIME:22:52:22
Bedford/Eldred pm90

STEP 3 LEFT TURNS FROM	C:ELDRED ST
CONFLICTING FLOWS	4261
CRITICAL GAPS	6.8
CAPACITY	2
ACTUAL CAPACITY	1

SUMMARY OF LEVEL OF SERVICE BY MOVEMENT

MOVEMENT	DEMAND	CAPACITY	RESERVE	LOS	AVG DEL(SEC)	AVG QUEUE
LT FROM B:	53	157	104	D	34.57	0.51
ALL MOVES FROM C:	82	3	-79	F	INFINITE	INFINITE

CINCH PROGRAM VERSION DATE 1-12-1987
1985 HCM - CHAPTER 10 : UNSIGNALIZED - 3 APPROACHES (PAGE 1 of 2)
DATE:08-19-1991 TIME:22:55:10
Bedfor/Eldred PM 95 nb

LAST DATASETS LOADED OR SAVED
VOLUME=27pm95n GEOMETRICS=27pm95n
KEY: A- -B
|
C

GENERAL CHARACTERISTICS
POPULATION GREATER THAN 250,000: NO
CONTROLS: FROM C: STOP
PREVAILING SPEED: 35 MPH
MAIN STREET # OF LANES: 4 LANES
MAIN STREET APPROACH A - EXCLUSIVE RIGHT TURN LANE: N

MINOR STREET LANES
APPROACH: C: ELDRED ST
SHARED LEFT AND RIGHT TURN LANE: YES
LARGE RIGHT TURN RADIUS OR SHALLOW RIGHT TURN ANGLE: NO
RIGHT TURN ACCELERATION LANE ON MAJOR: NO

SIGHT DISTANCE RESTRICTIONS (in seconds)

APPROACH	A: BEDFORD ST	B: BEDFORD ST	C: ELDRED ST
LEFTS	0.00	0.00	0.00
THRUS	0.00	0.00	0.00
RIGHTS	0.00	0.00	0.00

APPROACH	A: BEDFORD ST			B: BEDFORD ST			C: ELDRED ST		
	LT	TH	RT	LT	TH	RT	LT	TH	RT
VOLUME	0	1556	95	48	2143	0	31	0	37
PHF	0.87			0.91			0.77		
ADJ VOLUME	0	1789	109	53	2355	0	40	0	48
PERCENT GRADE	-1.00			0.00			-2.00		
PERCENT CYCLES	0.00			0.00			0.00		
PASSENGER CARS	99.00			99.00			94.00		
PERCENT LT TRU	1.00			1.00			3.00		
PERCENT HV TRU	0.00			0.00			3.00		
PASS CAR/HR	0			53			38	0	45

STEP 1 RIGHT TURNS FROM C:ELDRED ST

CONFLICTING FLOWS	949
CRITICAL GAPS	4.7
CAPACITY	509
ACTUAL CAPACITY	509

STEP 2 LEFT TURNS FROM B:BEDFORD ST

CONFLICTING FLOWS	1898
CRITICAL GAPS	5.1
CAPACITY	156
CAPACITY USED	34%
IMPEDANCE FACTOR	0.73
ACTUAL CAPACITY	156

1985 HCM - CHAPTER 10 : UNSIGNALIZED - 3 APPROACHES (PAGE 2 of 2)
DATE:08-19-1991 TIME:22:55:10
Bedfor/Eldred PM 95 nb

STEP 3 LEFT TURNS FROM	C:ELDRED ST
CONFLICTING FLOWS	4251
CRITICAL GAPS	6.8
CAPACITY	2
ACTUAL CAPACITY	1

SUMMARY OF LEVEL OF SERVICE BY MOVEMENT

MOVEMENT	DEMAND	CAPACITY	RESERVE	LOS	AVG DEL(SEC)	AVG QUEUE
LT FROM B:	53	156	103	D	34.96	0.51
ALL MOVES FROM C:	82	3	-79	F	INFINITE	INFINITE

CINCH PROGRAM VERSION DATE 1-12-1987
1985 HCM - CHAPTER 10 : UNSIGNALIZED - 3 APPROACHES (PAGE 1 of 2)
DATE:08-19-1991 TIME:22:56:45
Bedfrod/Eldred PM95 b

LAST DATASETS LOADED OR SAVED
VOLUME=27pm95n GEOMETRICS=27pm95b
KEY: A- -B
|
C

GENERAL CHARACTERISTICS
POPULATION GREATER THAN 250,000: NO
CONTROLS: FROM C: STOP
PREVAILING SPEED: 35 MPH
MAIN STREET # OF LANES: 4 LANES
MAIN STREET APPROACH A - EXCLUSIVE RIGHT TURN LANE: N

MINOR STREET LANES
APPROACH: C: ELDRED ST
SHARED LEFT AND RIGHT TURN LANE: YES
LARGE RIGHT TURN RADIUS OR SHALLOW RIGHT TURN ANGLE: NO
RIGHT TURN ACCELERATION LANE ON MAJOR: NO

SIGHT DISTANCE RESTRICTIONS (in seconds)

APPROACH	A: BEDFORD ST	B: BEDFORD ST	C: ELDRED ST
LEFTS	0.00	0.00	0.00
THRUS	0.00	0.00	0.00
RIGHTS	0.00	0.00	0.00

APPROACH	A: BEDFORD ST			B: BEDFORD ST			C: ELDRED ST		
	LT	TH	RT	LT	TH	RT	LT	TH	RT
VOLUME	0	1560	95	48	2182	0	31	0	37
PHF	0.87			0.91			0.77		
ADJ VOLUME	0	1793	109	53	2398	0	40	0	48
PERCENT GRADE	-1.00			0.00			-2.00		
PERCENT CYCLES	0.00			0.00			0.00		
PASSENGER CARS	99.00			99.00			94.00		
PERCENT LT TRU	1.00			1.00			3.00		
PERCENT HV TRU	0.00			0.00			3.00		
PASS CAR/HR	0			53			38	0	45

STEP 1 RIGHT TURNS FROM C:ELDRED ST

CONFLICTING FLOWS	951
CRITICAL GAPS	4.7
CAPACITY	508
ACTUAL CAPACITY	508

STEP 2 LEFT TURNS FROM B:BEDFORD ST

CONFLICTING FLOWS	1902
CRITICAL GAPS	5.1
CAPACITY	155
CAPACITY USED	34%
IMPEDANCE FACTOR	0.73
ACTUAL CAPACITY	155

DATE:08-19-1991 TIME:22:56:45
Bedfrod/Eldred PM95 b

STEP 3 LEFT TURNS FROM C:ELDRED ST	
CONFLICTING FLOWS	4298
CRITICAL GAPS	6.8
CAPACITY	2
ACTUAL CAPACITY	1

SUMMARY OF LEVEL OF SERVICE BY MOVEMENT

MOVEMENT	DEMAND	CAPACITY	RESERVE	LOS	AVG DEL(SEC)	AVG QUEUE
LT FROM B:	53	155	102	D	35.22	0.52
ALL MOVES FROM C:	82	3	-79	F	INFINITE	INFINITE

CINCH PROGRAM VERSION DATE 1-12-1987
1985 HCM - CHAPTER 10 : UNSIGNALIZED - 3 APPROACHES (PAGE 1 of 2)
DATE:08-16-1991 TIME:20:25:44
GREAT RD/BROOKSBIE RD

LAST DATASETS LOADED OR SAVED
VOLUME=20am90 GEOMETRICS=20am90
KEY: A- -B
|
C

GENERAL CHARACTERISTICS
POPULATION GREATER THAN 250,000: YES
CONTROLS: FROM C: STOP
PREVAILING SPEED: 35 MPH
MAIN STREET # OF LANES: 2 LANES
MAIN STREET APPROACH A - EXCLUSIVE RIGHT TURN LANE: N

MINOR STREET LANES
APPROACH: C: BROOKSBIE RD
SHARED LEFT AND RIGHT TURN LANE: YES
LARGE RIGHT TURN RADIUS OR SHALLOW RIGHT TURN ANGLE: YES
RIGHT TURN ACCELERATION LANE ON MAJOR: NO

SIGHT DISTANCE RESTRICTIONS (in seconds)

APPROACH	A: GREAT RD NB	B: GREAT RD SB	C: BROOKSBIE R
LEFTS	0.00	0.00	1.00
THRUS	0.00	0.00	0.00
RIGHTS	0.00	0.00	1.00

APPROACH	A: GREAT RD NB			B: GREAT RD SB			C: BROOKSBIE R		
	LT	TH	RT	LT	TH	RT	LT	TH	RT
VOLUME	0	617	43	401	715	0	46	0	433
PHF	0.89			0.94			0.88		
ADJ VOLUME	0	693	48	427	761	0	52	0	492
PERCENT GRADE	1.30			-2.00			-1.40		
PERCENT CYCLES	0.00			0.00			0.00		
PASSENGER CARS	92.00			91.00			94.00		
PERCENT LT TRU	4.00			5.00			3.00		
PERCENT HV TRU	4.00			4.00			3.00		
PASS CAR/HR	0			403			50	0	475

STEP 1 RIGHT TURNS FROM C:BROOKSBIE RD

CONFLICTING FLOWS	717
CRITICAL GAPS	5.7
CAPACITY	454
ACTUAL CAPACITY	454

STEP 2 LEFT TURNS FROM B:GREAT RD SB

CONFLICTING FLOWS	742
CRITICAL GAPS	4.6
CAPACITY	649
CAPACITY USED	62%
IMPEDANCE FACTOR	0.45
ACTUAL CAPACITY	649

DATE:08-16-1991 TIME:20:25:44
GREAT RD/BROOKSBIE RD

STEP 3 LEFT TURNS FROM	C:BROOKSBIE RD
CONFLICTING FLOWS	1905
CRITICAL GAPS	7.3
CAPACITY	45
ACTUAL CAPACITY	20

SUMMARY OF LEVEL OF SERVICE BY MOVEMENT

MOVEMENT	DEMAND	CAPACITY	RESERVE	LOS	AVG DEL(SEC)	AVG QUEUE
LT FROM B:	403	649	246	C	14.66	1.64
ALL MOVES FROM C:	526	147	-378	F	INFINITE	INFINITE

CINCH PROGRAM VERSION DATE 1-12-1987
1985 HCM - CHAPTER 10 : UNSIGNALIZED - 3 APPROACHES (PAGE 1 of 2)
DATE:08-20-1991 TIME:18:13:08
Great Rd./Brooksbie AM 1995 nb

LAST DATASETS LOADED OR SAVED
VOLUME=20am95 GEOMETRICS=20am95
KEY: A- -B
|
C

GENERAL CHARACTERISTICS
POPULATION GREATER THAN 250,000: YES
CONTROLS: FROM C: STOP
PREVAILING SPEED: 35 MPH
MAIN STREET # OF LANES: 2 LANES
MAIN STREET APPROACH A - EXCLUSIVE RIGHT TURN LANE: N

MINOR STREET LANES
APPROACH: C: BROOKSBIE RD
SHARED LEFT AND RIGHT TURN LANE: YES
LARGE RIGHT TURN RADIUS OR SHALLOW RIGHT TURN ANGLE: YES
RIGHT TURN ACCELERATION LANE ON MAJOR: NO

SIGHT DISTANCE RESTRICTIONS (in seconds)

APPROACH	A: GREAT RD NB	B: GREAT RD SB	C: BROOKSBIE R
LEFTS	0.00	0.00	1.00
THRUS	0.00	0.00	0.00
RIGHTS	0.00	0.00	1.00

APPROACH	A: GREAT RD NB			B: GREAT RD SB			C: BROOKSBIE R		
	LT	TH	RT	LT	TH	RT	LT	TH	RT
VOLUME	0	708	68	446	899	0	33	0	448
PHF	0.89			0.94			0.88		
ADJ VOLUME	0	796	76	474	956	0	38	0	509
PERCENT GRADE	1.30			-2.00			-1.40		
PERCENT CYCLES	0.00			0.00			0.00		
PASSENGER CARS	92.00			91.00			94.00		
PERCENT LT TRU	4.00			5.00			3.00		
PERCENT HV TRU	4.00			4.00			3.00		
PASS CAR/HR	0			449			36	0	492

STEP 1 RIGHT TURNS FROM C:BROOKSBIE RD

CONFLICTING FLOWS	834
CRITICAL GAPS	5.7
CAPACITY	395
ACTUAL CAPACITY	395

STEP 2 LEFT TURNS FROM B:GREAT RD SB

CONFLICTING FLOWS	872
CRITICAL GAPS	4.6
CAPACITY	572
CAPACITY USED	78%
IMPEDANCE FACTOR	0.27
ACTUAL CAPACITY	572

DATE:08-20-1991 TIME:18:13:08
Great Rd./Brooksbie AM 1995 nb

STEP 3 LEFT TURNS FROM	C:BROOKSBIE RD
CONFLICTING FLOWS	2265
CRITICAL GAPS	7.3
CAPACITY	26
ACTUAL CAPACITY	7

SUMMARY OF LEVEL OF SERVICE BY MOVEMENT

MOVEMENT	DEMAND	CAPACITY	RESERVE	LOS	AVG DEL(SEC)	AVG QUEUE
LT FROM B:	449	572	123	D	29.23	3.64
ALL MOVES FROM C:	528	82	-446	F	INFINITE	INFINITE

CINCH PROGRAM VERSION DATE 1-12-1987
1985 HCM - CHAPTER 10 : UNSIGNALIZED - 3 APPROACHES (PAGE 1 of 2)
DATE:08-20-1991 TIME:18:14:50
Great Rd./Brooksbie AM 1995 b

LAST DATASETS LOADED OR SAVED
VOLUME=20am95b GEOMETRICS=20am95b
KEY: A- -B
|
C

GENERAL CHARACTERISTICS
POPULATION GREATER THAN 250,000: YES
CONTROLS: FROM C: STOP
PREVAILING SPEED: 35 MPH
MAIN STREET # OF LANES: 2 LANES
MAIN STREET APPROACH A - EXCLUSIVE RIGHT TURN LANE: N

MINOR STREET LANES
APPROACH: C: BROOKSBIE RD
SHARED LEFT AND RIGHT TURN LANE: YES
LARGE RIGHT TURN RADIUS OR SHALLOW RIGHT TURN ANGLE: YES
RIGHT TURN ACCELERATION LANE ON MAJOR: NO

SIGHT DISTANCE RESTRICTIONS (in seconds)

APPROACH	A: GREAT RD NB	B: GREAT RD SB	C: BROOKSBIE R
LEFTS	0.00	0.00	1.00
THRUS	0.00	0.00	0.00
RIGHTS	0.00	0.00	1.00

APPROACH	A: GREAT RD NB			B: GREAT RD SB			C: BROOKSBIE R		
	LT	TH	RT	LT	TH	RT	LT	TH	RT
VOLUME	0	708	68	446	907	0	33	0	448
PHF	0.89			0.94			0.88		
ADJ VOLUME	0	796	76	474	965	0	38	0	509
PERCENT GRADE	1.30			-2.00			-1.40		
PERCENT CYCLES	0.00			0.00			0.00		
PASSENGER CARS	92.00			91.00			94.00		
PERCENT LT TRU	4.00			5.00			3.00		
PERCENT HV TRU	4.00			4.00			3.00		
PASS CAR/HR	0			449			36	0	492

STEP 1 RIGHT TURNS FROM C:BROOKSBIE RD

CONFLICTING FLOWS	834
CRITICAL GAPS	5.7
CAPACITY	395
ACTUAL CAPACITY	395

STEP 2 LEFT TURNS FROM B:GREAT RD SB

CONFLICTING FLOWS	872
CRITICAL GAPS	4.6
CAPACITY	572
CAPACITY USED	78%
IMPEDANCE FACTOR	0.27
ACTUAL CAPACITY	572

DATE:08-20-1991 TIME:18:14:50
Great Rd./Brooksbie AM 1995 b

STEP 3 LEFT TURNS FROM	C:BROOKSBIE RD
CONFLICTING FLOWS	2273
CRITICAL GAPS	7.3
CAPACITY	25
ACTUAL CAPACITY	7

SUMMARY OF LEVEL OF SERVICE BY MOVEMENT

MOVEMENT	DEMAND	CAPACITY	RESERVE	LOS	AVG DEL(SEC)	AVG QUEUE
LT FROM B:	449	572	123	D	29.23	3.64
ALL MOVES FROM C:	528	81	-447	F	INFINITE	INFINITE

CINCH PROGRAM VERSION DATE 1-12-1987
1985 HCM - CHAPTER 10 : UNSIGNALIZED - 3 APPROACHES (PAGE 1 of 2)
DATE:08-19-1991 TIME:22:04:16
GREAT RD/BROOKSBIE RD 1990 PM

LAST DATASETS LOADED OR SAVED
VOLUME=20pm90 GEOMETRICS=20pm90
KEY: A- -B
|
C

GENERAL CHARACTERISTICS
POPULATION GREATER THAN 250,000: YES
CONTROLS: FROM C: STOP
PREVAILING SPEED: 35 MPH
MAIN STREET # OF LANES: 2 LANES
MAIN STREET APPROACH A - EXCLUSIVE RIGHT TURN LANE: N

MINOR STREET LANES
APPROACH: C: BROOKSBIE RD
SHARED LEFT AND RIGHT TURN LANE: YES
LARGE RIGHT TURN RADIUS OR SHALLOW RIGHT TURN ANGLE: YES
RIGHT TURN ACCELERATION LANE ON MAJOR: NO

SIGHT DISTANCE RESTRICTIONS (in seconds)

APPROACH	A: GREAT RD NB	B: GREAT RD SB	C: BROOKSBIE R
LEFTS	0.00	0.00	1.00
THRUS	0.00	0.00	0.00
RIGHTS	0.00	0.00	1.00

APPROACH	A: GREAT RD NB			B: GREAT RD SB			C: BROOKSBIE R		
	LT	TH	RT	LT	TH	RT	LT	TH	RT
VOLUME	0	680	58	510	871	0	29	0	341
PHF	0.88			0.89			0.88		
ADJ VOLUME	0	773	66	573	979	0	33	0	388
PERCENT GRADE	1.30			-2.00			-1.40		
PERCENT CYCLES	0.00			0.00			0.00		
PASSENGER CARS	92.00			91.00			94.00		
PERCENT LT TRU	4.00			5.00			3.00		
PERCENT HV TRU	4.00			4.00			3.00		
PASS CAR/HR	0			542			32	0	374

STEP 1 RIGHT TURNS FROM C:BROOKSBIE RD

CONFLICTING FLOWS	806
CRITICAL GAPS	5.7
CAPACITY	408
ACTUAL CAPACITY	408

STEP 2 LEFT TURNS FROM B:GREAT RD SB

CONFLICTING FLOWS	839
CRITICAL GAPS	4.6
CAPACITY	591
CAPACITY USED	92%
IMPEDANCE FACTOR	0.12
ACTUAL CAPACITY	591

1985 HCM - CHAPTER 10 : UNSIGNALIZED - 3 APPROACHES (PAGE 2 of 2)
DATE:08-19-1991 TIME:22:04:16
GREAT RD/BROOKSBIE RD

STEP 3 LEFT TURNS FROM	C:BROOKSBIE RD
CONFLICTING FLOWS	2357
CRITICAL GAPS	7.3
CAPACITY	22
ACTUAL CAPACITY	3

SUMMARY OF LEVEL OF SERVICE BY MOVEMENT

MOVEMENT	DEMAND	CAPACITY	RESERVE	LOS	AVG DEL(SEC)	AVG QUEUE
LT FROM B:	542	591	49	E	73.85	11.11
ALL MOVES FROM C:	406	31	-375	F	INFINITE	INFINITE

CINCH PROGRAM VERSION DATE 1-12-1987
1985 HCM - CHAPTER 10 : UNSIGNALIZED - 3 APPROACHES (PAGE 1 of 2)
DATE:08-19-1991 TIME:23:25:24
Great Rd/Brooksbie pm95nb

LAST DATASETS LOADED OR SAVED
VOLUME=20pm95n GEOMETRICS=20pm95n
KEY: A- -B
|
C

GENERAL CHARACTERISTICS
POPULATION GREATER THAN 250,000: YES
CONTROLS: FROM C: STOP
PREVAILING SPEED: 35 MPH
MAIN STREET # OF LANES: 2 LANES
MAIN STREET APPROACH A - EXCLUSIVE RIGHT TURN LANE: N

MINOR STREET LANES
APPROACH: C: BROOKSBIE RD
SHARED LEFT AND RIGHT TURN LANE: YES
LARGE RIGHT TURN RADIUS OR SHALLOW RIGHT TURN ANGLE: YES
RIGHT TURN ACCELERATION LANE ON MAJOR: NO

SIGHT DISTANCE RESTRICTIONS (in seconds)

APPROACH	A: GREAT RD NB	B: GREAT RD SB	C: BROOKSBIE R
LEFTS	0.00	0.00	1.00
THRUS	0.00	0.00	0.00
RIGHTS	0.00	0.00	1.00

APPROACH	A: GREAT RD NB			B: GREAT RD SB			C: BROOKSBIE R		
	LT	TH	RT	LT	TH	RT	LT	TH	RT
VOLUME	0	708	68	553	899	0	33	0	367
PHF	0.88			0.89			0.88		
ADJ VOLUME	0	805	77	621	1010	0	38	0	417
PERCENT GRADE	1.30			-2.00			-1.40		
PERCENT CYCLES	0.00			0.00			0.00		
PASSENGER CARS	92.00			91.00			94.00		
PERCENT LT TRU	4.00			5.00			3.00		
PERCENT HV TRU	4.00			4.00			3.00		
PASS CAR/HR	0			587			36	0	403

STEP 1 RIGHT TURNS FROM C:BROOKSBIE RD

CONFLICTING FLOWS	843
CRITICAL GAPS	5.7
CAPACITY	390
ACTUAL CAPACITY	390

STEP 2 LEFT TURNS FROM B:GREAT RD SB

CONFLICTING FLOWS	882
CRITICAL GAPS	4.6
CAPACITY	566
CAPACITY USED	104%
IMPEDANCE FACTOR	0.00
ACTUAL CAPACITY	566

DATE:08-19-1991 TIME:23:25:24
Great Rd/Brooksbie pm95nb

STEP 3 LEFT TURNS FROM C:BROOKSBIE RD

CONFLICTING FLOWS	2475
CRITICAL GAPS	7.3
CAPACITY	19
ACTUAL CAPACITY	0

SUMMARY OF LEVEL OF SERVICE BY MOVEMENT

MOVEMENT	DEMAND	CAPACITY	RESERVE	LOS	AVG DEL(SEC)	AVG QUEU
LT FROM B:	587	566	-21	F	INFINITE	INFINITE
ALL MOVES FROM C:	439	0	-439	F	INFINITE	INFINITE

CINCH PROGRAM VERSION DATE 1-12-1987
1985 HCM - CHAPTER 10 : UNSIGNALIZED - 3 APPROACHES (PAGE 1 of 2)
DATE:08-19-1991 TIME:23:28:26
Great Rd./Brooksbie PM 95 B

LAST DATASETS LOADED OR SAVED
VOLUME=20pm95b GEOMETRICS=20pm95b
KEY: A- -B
|
C

GENERAL CHARACTERISTICS
POPULATION GREATER THAN 250,000: YES
CONTROLS: FROM C: STOP
PREVAILING SPEED: 35 MPH
MAIN STREET # OF LANES: 2 LANES
MAIN STREET APPROACH A - EXCLUSIVE RIGHT TURN LANE: N

MINOR STREET LANES
APPROACH: C: BROOKSBIE RD
SHARED LEFT AND RIGHT TURN LANE: YES
LARGE RIGHT TURN RADIUS OR SHALLOW RIGHT TURN ANGLE: YES
RIGHT TURN ACCELERATION LANE ON MAJOR: NO

SIGHT DISTANCE RESTRICTIONS (in seconds)

APPROACH	A: GREAT RD NB	B: GREAT RD SB	C: BROOKSBIE R
LEFTS	0.00	0.00	1.00
THRUS	0.00	0.00	0.00
RIGHTS	0.00	0.00	1.00

APPROACH	A: GREAT RD NB			B: GREAT RD SB			C: BROOKSBIE R		
	LT	TH	RT	LT	TH	RT	LT	TH	RT
VOLUME	0	708	68	553	899	0	33	0	367
PHF	0.88			0.89			0.88		
ADJ VOLUME	0	805	77	621	1010	0	38	0	417
PERCENT GRADE	1.30			-2.00			-1.40		
PERCENT CYCLES	0.00			0.00			0.00		
PASSENGER CARS	92.00			91.00			94.00		
PERCENT LT TRU	4.00			5.00			3.00		
PERCENT HV TRU	4.00			4.00			3.00		
PASS CAR/HR	0			587			36	0	403

STEP 1 RIGHT TURNS FROM C:BROOKSBIE RD

CONFLICTING FLOWS	843
CRITICAL GAPS	5.7
CAPACITY	390
ACTUAL CAPACITY	390

STEP 2 LEFT TURNS FROM B:GREAT RD SB

CONFLICTING FLOWS	882
CRITICAL GAPS	4.6
CAPACITY	566
CAPACITY USED	104%
IMPEDANCE FACTOR	0.00
ACTUAL CAPACITY	566

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1985 HCM - CHAPTER 10 : UNSIGNALIZED - 3 APPROACHES (PAGE 2 of 2)
DATE:08-19-1991 TIME:23:28:26
Great Rd./Brooksbie PM 95 B

STEP 3 LEFT TURNS FROM	C:BROOKSBIE RD
CONFLICTING FLOWS	2475
CRITICAL GAPS	7.3
CAPACITY	19
ACTUAL CAPACITY	0

SUMMARY OF LEVEL OF SERVICE BY MOVEMENT

MOVEMENT	DEMAND	CAPACITY	RESERVE	LOS	AVG DEL(SEC)	AVG QUEU
LT FROM B:	587	566	-21	F	INFINITE	INFINITE
ALL MOVES FROM C:	439	0	-439	F	INFINITE	INFINITE